

U.S.I. JOURNAL

INDIA'S OLDEST JOURNAL ON DEFENCE AFFAIRS

(Established : 1870)



PRINCIPAL CONTENTS

- A Military Policy for the Nineties - *Lt Gen A M Vohra, PVSM (Retd)*
- Higher Defence Organisation in India - *Air Marshal M L Sethi, PVSM, AVSM (Retd)*
- Disarmament and Development - *Dr T T Poulouse*
- Employment of Armed Forces as a Political Instrument - *Commander C T Joseph NM IN*
- A Riposte to Navy's Blue Water Obsession - *Sage*
- On Generalship : An Historical Perspective - *Major Harold E Raugh*

JANUARY-MARCH 1990



Total capability in airborne defence

Manufacturers of :

Jaguar, MiG, Kiran, HPT-32, HTT-34,
Dornier Aircraft. Cheetah, Chetak
Helicopters & Gliders.

Jet, Turbo-prop and piston engine
power plants and Gas Turbines.

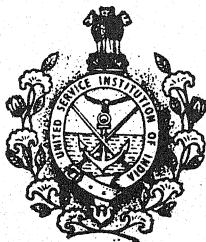
Advanced Avionics, Accessories and
Armament Space Vehicles
Structurals. Forgings, Castings &
Super Alloys.

Hindustan Aeronautics Limited
15/1, Cubban Road,
Bangalore - 560 001

ISSN 0041-770X

The
Journal
of the
United Service Institution
of
India

Published by Authority of the Council



(Established : 1870)

Postal Address:
KASHMIR HOUSE, RAJAJI MARG, NEW DELHI-110011
Telephone No 3015828

Vol CXX

JANUARY-MARCH 1990

No. 499

USI Journal is published Quarterly in April, July, October and January.
Subscription per annum: In India Rs. 80.00 Foreign £10.50 or \$ 20.00 by Sea
Mail. Subscription should be sent to the Director. It is supplied free to the
members of the Institution. Articles, Correspondence and Books for Review
should be sent to the Editor. Advertisement enquiries concerning space should
be sent to the Director.

UNITED SERVICE INSTITUTION OF INDIA

for

*the furtherance of
interest and know-
ledge in the art,
science and literature
of National Security
in general and of the
Defence Services
in particular*

Director

Maj Gen SC Sinha,
PVSM (Retd)

Dy Director & Editor

Air Cmde N B Singh,
MA, IAF (Retd)

Dy Director (Admin)

Brig G L Sachdeva
(Retd)

Chief Instructor

Lt Col P K Dhawan

Librarian

Mr O S Sachdeva

Accountant

Mr S L Bhalla

Patron

The President of India

Vice-Patron

Governor of Andhra Pradesh
Governor of Arunachal Pradesh
Governor of Assam, Meghalaya
Governor of Bihar
Governor of Goa, Daman and Diu
Governor of Gujarat
Governor of Haryana.
Governor of Himachal Pradesh
Governor of Jammu & Kashmir
Governor of Karnataka
Governor of Kerala
Governor of Madhya Pradesh
Governor of Mizoram
Governor of Nagaland, Manipur and Tripura
Governor of Orissa
Governor of Punjab
Governor of Rajasthan
Governor of Sikkim
Governor of Tamil Nadu
Governor of Uttar Pradesh
Governor of West Bengal
Lt Governor of Delhi
Lt Governor of Pondicherry
Minister of Defence

Shri I K Gujral, Minister for External Affairs

Admiral J G Nadkarni, PVSM, AVSM, NM, Chief of the Naval Staff

Gen VN Sharma, PVSM, AVSM, Chief of the Army Staff

Air Chief Marshal S K Mehra PVSM, AVSM, VM, ADC, Chief of the Air Staff

President

Air Marshal NC Suri, PVSM, AVSM, VM, ADC, Vice Chief of the Air Staff

Vice Presidents

Vice Admiral SC Chopra, PVSM, AVSM, NM, ADC, Vice Chief of the Naval Staff

Lt Gen VK Sood, PVSM, AVSM, Vice Chief of the Army Staff

Ex-Officio Members

Lt Gen VP Airy, MVC, Director General Military Training

Air Vice-Marshal SDL Tully, Director of Training, Air HQ

Commodore G Rai, NM, VSM, Director of Naval Training

Elected Members of the Council

Lt Gen ZC Bakshi, PVSM, MVC, Vrc, VSM (Retd)

Air Vice Marshal M Banerji, MVC, VM (Retd)

Lt Gen (Dr) ML Chibber, PVSM, AVSM, PhD (Retd)

Lt Gen IS Gill, PVSM, MC (Retd)

Lt Gen JFR Jacob, PVSM (Retd)

Lt Gen SL Menezes, PVSM, SC (Retd)

Lt Gen DC Nanda, PVSM, AVSM (Retd)

Lt Gen VK Nayar, PVSM, SM (Retd)

Lt Gen SF Rodrigues, PVSM, VSM, ADC

Lt Gen RK Jasbir Singh, PVSM (Retd)

Lt Gen SK Sinha, PVSM (Retd)

Lt Gen M Thomas, PVSM, AVSM, VSM (Retd)

Lt Gen EA Vas, PVSM (Retd)

Lt Gen MA Zaki, AVSM, Vrc

Co-opted Members

Air Marshal TS Brar, PVSM, AVSM (Retd)

Vice Admiral S Mookerjee, PVSM, AVSM (Retd)

Vice Admiral KASZ Raju, AVSM, NM

Executive Committee

Lt Gen VP Airy, MVC, Director General Military Training

Air Vice Marshal SDL Tully Director of Training, Air HQ

Commodore G Rai, NM, VSM, Director of Naval Training

Lt Gen Z C Bakshi, PVSM, MVC, Vrc, VSM (Retd)

Air Vice Marshal M Banerji, MVC, VM (Retd)

Lt Gen JFR Jacob, PVSM (Retd)

Lt Gen SL Menezes, PVSM, SC (Retd)

Vice Admiral S Mookerjee, PVSM, AVSM (Retd)

Lt Gen V K Nayar, PVSM, AVSM (Retd)

CONTENTS

Editorial.....	1
President's Report for the Year 1989	
Air Marshal N C Suri, PVSM, AVSM, VM, ADC.....	2
A Military Policy for the Nineties	
Lt Gen A M Vohra, PVSM (Retd).....	8
Higher Defence Organisation in India	
Air Marshal M L Sethi, PVSM, AVSM (Retd).....	21
Disarmament and Development	
Dr T T Poullose.....	28
Employment of Armed Forces as a Political Instrument	
Commander C T Joseph NM IN.....	39
A Riposte to Navy's Blue Water Obsession	
Sage.....	50
On Generalship : An Historical Perspective	
Major Harold E Raugh.....	60
The Role of Indian Army	
Maj Gen (Dr) K L Kochar, PVSM (Retd).....	68
In Aid to Civil Authority : A Case Study of an Episode in Gujarat-1985	
Maj Gen Afsir Karim, AVSM (Retd).....	72
Arms Proliferation in the Third World :	
The Rationale of Defence Exports from India	
Wg Cdr P Khokhar, VM.....	80
Conventional Defence Initiatives in the 1990's	
Maj Gen V K Madhok, AVSM, VSM (Retd).....	93
Surprise-A Potent Weapon of War	
Maj Gen M M Walia.....	97
Historical Events in the Growth of Navy and Naval Dockyard, Bombay	
Commodore B K Dattamajumdar, VSM, IN.....	101
REVIEW ARTICLES	
Socialism in Theory and Practice	
Lt Gen M L Thapan, PVSM (Retd).....	106
Gorbachev's Perestroika-New Thinking and India	
Brig D Banerjee.....	109
Gulf Politics	
Col R Ramarao, AVSM (Retd).....	112
Islamic Revolution in Iran	
Brig Chandra B Khanduri.....	115
Book Reviews.....	117
Additions to the USI Library.....	135

NOTE

"The views expressed in the Journal are in no sense official and the opinions of contributors and the Editor in their published articles are not necessarily those of the Council of Institution"

Para Military Forces	
by Lt Gen ML Chibber, PVSM, AVSM	Price: Rs. 10.00
Defence Budgeting in India	
by Shri DS Nakra(Retd)	Price: Rs. 10.00
Possible Counter Measures against Satellite Reconnaissance	
by Air Marshal IW Sabhaney, AVSM	Price: Rs. 10.00
Higher Defence Organisation	
by Lt Gen SK Sinha, PVSM(Retd)	Price: Rs. 10.00
Leadership in the Indian Army During Eighties and Nineties	
by Lt Gen ML Chibber, PVSM, AVSM	Price: Rs. 10.00
China's Strategic Posture in the 1980's (Revised)	
by Lt Gen AM Vohra, PVSM	Price: Rs. 15.00

Report on Armoured Personnel Carriers	
Chairman Maj Gen D Som Dutt(Retd)	Price: Rs. 5.00
Report on the Imposition of a Manpower Ceiling on the Army	
Chairman Lt Gen ML Thapan, PVSM(Retd)	Price: Rs. 5.00
Retiring Age in the Armed Forces	
Chairman Brig NB Grant, AVSM(Retd)	Price: Rs. 7.50
Report on Recruitment into the Officer Corps of the Armed Forces	
Chairman Maj Gen D Som Dutt (Retd)	Price: Rs. 5.00
Report on a Seminar on Cooperation in Defence	
Chairman Lt Gen ML Thapan, PVSM(Retd)	Price: Rs. 5.00
Report on a Seminar on Review of the Organisation Pattern of the Indian Army	
Chairman Lt Gen ML Thapan, PVSM(Retd)	Price: Rs. 10.00
Report on the Military Threat in the Nineteen Eighties	
Chairman Lt Gen AM Vohra, PVSM(Retd)	Price: Rs. 15.00
Report on Nuclear Shadow over the Sub-Continent	
Chairman Maj Gen DK Palit, VrC	Price: Rs. 10.00
Relationship of Military Law and Discipline with the Judicial System of the Country	
Chairman Lt Gen ML Thapan, PVSM (Retd)	Price: Rs. 15.00
Report on Military and Society	
Chairman Lt Gen AM Vohra, PVSM(Retd)	Price: Rs. 30.00

India's Problems of National Security in the Seventies	
by Gen JN Chaudhuri	Price: Rs. 10.00
India's Defence Policy and Organisation Since Independence	
by Shri PVR Rao, ICS(Retd)	Price: Rs. 25.00
Some Problems of India's Defence	
by Air Chief Marshal PC Lal, DFC(Retd)	Price: Rs. 25.00
Defence and Development by Shri HC Sarin, ICS (Retd)	Price: Rs. 25.00
The Indian Ocean & India's Maritime Security	
by Adm SN Kohli, PVSM(Retd)	Price: Rs. 25.00
Internal Threats and National Security by Shri Govind Narain, ICS(Retd)	Price: Rs. 35.00
National Security and Modern Technology	
by Dr Raja Ramanna	Price: Rs. 25.00

Contains: informative and authoritative articles	Price: Rs. 25.00
--	------------------

Ask for your copy from:

DIRECTOR, UNITED SERVICE INSTITUTION OF INDIA
Kashmir House, Rajaji Marg, New Delhi-110011

National Security in the New Decade

The nation today is facing two serious challenges to its political well-being; first, a critical economic situation as a result of mounting foreign and internal debt, and secondly, a dangerous escalation in the degree of internal and external threat to our democratic and secular polity. Both these challenges have grave impact on the security of the nation.

In this situation, the latent contradiction between development and defence has to be resolved. On the one hand, we want to provide employment to all our people and improve the quality of life of the common man, and on the other, we want adequate security so that development process could continue without outside interference or internal strife.

To meet these competing demands on our limited resources, it is necessary not to live from day-to-day on an ad-hoc basis, but to think and plan, on a long-term perspective of 10-15 years, our strategy for meeting the twin objectives of development and defence. Long-term planning will be more cost-effective in both areas.

However, to plan on a long-term and continuous basis, there is a need for an institutional infrastructure with a group of experts in security and security-related fields, efficiently to carry out this very vital task. This body of experts, whether we call it the National Security Council, or by any other name, is urgently needed, to clearly define our security objectives, and strategies to achieve them, while keeping in view the internal, regional and global environmental factors in the 1990s.

In this context, it is axiomatic that accurate inputs about the degree and dimensions of the present threat and its likely form during the next 10-15 years should form a vital ingredient in the process of defining our objectives and strategies for the new decade. Without a realistic appraisal of the present and future threat, no security planning is likely to succeed.

The task of planning for our security in the 1990s would, therefore, need a dedicated body with total support from the intelligence organisations, and the two functions of security planning and intelligence will have to be closely inter-faced to avoid embarrassing surprises; we cannot continue to blame lack of intelligence for our future failures.

The new decade needs a new vision; clear, far-sighted and realistic, on which a security policy can be formulated. A National Security Council, composed of and organised by the right people, could provide this new vision.

President's Report for the Year 1989

AIR MARSHAL N C SURI, PVSM, AVSM, VM, A D C
VICE CHIEF OF THE AIR STAFF AND PRESIDENT OF THE USI COUNCIL

Gentlemen, I welcome you to the USI Council meeting for 1989. Since the election for the Council for 1990-1992 has been completed and the new Council formed, this morning's meeting of this Council will be its last. The first meeting of the new Council is being convened this afternoon. I am making this report common to both the Council meetings. I wish to take this opportunity of extending a warm welcome to all our new members, who have joined the Council since our last meeting and I thank you for taking all the trouble to be present with us.

As far as the working of our Institution is concerned, 1989 has been a year of consolidation and there is much to be satisfied about. The improvement in the enrolment of new members, the regular publication and the quality of the USI Journal and the results obtained by the Courses Section are all very commendable. But let me at the outset frankly confess to you that we are fast approaching a ceiling, the very limit to our activities, that is unfortunately imposed by these cramped quarters and the grossly inadequate accommodation that we are forced to occupy. We are reaching the stage where we cannot employ even one more clerk because we do not have room enough to place an additional table and chair.

We have for several years been trying to get a piece of land on which we can get on with our building project. So far, inspite of various promises and assurances, we are nowhere nearer to our goal than we were last year. This has been most frustrating and I would not like to, at this stage, even hazard a guess about when we will be able to solve this problem.

The other unhappy aspect is to do with our income and expenditure state. I will deal with this aspect later when I touch upon our financial state.

MEMBERSHIP

We have had another very successful year in enrolling new life members. The membership state of the Institution is as follows :

	Army	Navy	Air Force	Civilian
(a) Life Members	2,446	49	116	51
(b) Ordinary Members	1,125	53	46	1
(c) Total	3,571	102	162	52

Over the last two years we have doubled the number of life members. This has been possible because in the past we have been encouraging the enrolment of life members. I would, however, like to sound a note of warning. I have been informed by the Director that during his recent visit to London, where he visited the RUSI, he found that they had discontinued life membership. The Director RUSI was of the opinion that in the long run, because of the continuing inflation, life membership would not be viable and, over the years, likely to become a liability. It is, therefore, for consideration whether we should not slow down on the enrolment of life members in future. Towards this end, as a first step we may consider withdrawing the rebate of 10%, which we now offer on the tuition fees for our correspondence courses to life members. We should, however, continue without any let up our drive to enrol more new ordinary members and subscriber members.

FINANCES

The audited income and expenditure report along with the audit report for 1989/90 and our answers to the audit objections were sent to you. I hope you have had time to examine them.

The overall income and expenditure position of the Institution over the last four years is as follows:-

Year	Income	Expenditure	Surplus
1985	5,42,079.44	2,48,062.46	2,94,016.98
1986	7,37,357.17	3,14,910.40	4,22,446.77
1987	7,07,574.91	3,04,344.59	4,03,230.32
1988/89	14,91,185.66	7,21,535.48	7,69,650.18

As in previous years, a certain portions of the interest received on investments have been transferred to various funds and have not been reflected in the income. A sum of Rs. 6,40,043.15, as against Rs. 5,73,098.19 in 1987, has been apportioned to Revision Courses Fund (Rs. 1,97,166.70), Building Fund (Rs. 2,78,288.10) Education and Training Fund (Rs. 99,720.05) and Library Fund (Rs. 64,868.30). Therefore the total surplus for 1988 is Rs. 14,09,693.33, as against Rs. 9,76,328.51 in 1987.

As on date the investment position of the Institution is :-

(a)	USI Corpus Fund		
(i)	Public Sector	94,94,000.00	
(ii)	Nationalised Banks	Nil	
(b)	NEW BUILDING FUND		
	Public Sector Undertaking	1,83,03,000.00	

From the financial position, I have given you the finances of our Institution are indeed in a very healthy position. But this is not entirely so as far as our current annual income is concerned. Without including the interest accruing on our past savings, the current annual income for several years has not shown such a happy position. This is clear from the figures of the excess of expenditure over our current yearly income (excluding the interest from investments) for the last few years :-

	Year	Income	Expenditure	Deficit
(a)	1987	3,35,094.06	3,56,726.11	21,632.05
(b)	1988/89	5,60,044.59	8,47,869.87	2,87,825.28
(c)	1989/90	5,76,000.00	7,62,520.00	1,86,520.00
	Revised			
(d)	Forecast			
	1990/91	5,61,000.00	7,90,520.00	2,29,520.00

It will be seen that the income from membership along with the income from courses and other grants has not kept up with the expenditure. It is in this context that I sounded a warning earlier about the enrolment of life members. We also have to think of ways and means to maximise our income. I would like to call on all members of the Council to give serious thought to this aspect.

THE USI JOURNAL

The quality of the USI Journal has drawn considerable praise from various sources from within and outside the country. I would like to congratulate the Editor for this commendable achievement. I have full confidence that this improvement will be maintained. There is, however, one aspect which needs improvement. We are at present not getting sufficient number of advertisements for the Journal. More advertisements will help us to reduce the cost of production. Towards this end, I request all members to help the USI in getting advertisements for the Journal.

CORRESPONDENCE COURSES

The working of the correspondence courses has been good as will be seen from the examination results :-

Results - USI Correspondence Courses - 1989

Course	Number of Students	USI	Percentage Overall 75% of Competitive vacancies	Non-USI Students
(a) DSSC(Army) Apr 89	675	29%	22%	17%
(b) DSSC (Navy Paper VII Jul 89 (First Course)	89	68%	53%	49%
(c) DSSC (AF) July 89	93	64%	59%	57%
(d) Part B Feb 89		287	36%	28%
(e) Part D Sep 89	395	35%	30%	29.6%

OTHER ACTIVITIES OF THE USI IN 1989

NATIONAL SECURITY LECTURE

This year's lecture, which is to be given by Shri Narasimha Rao, is scheduled for Feb 90. As directed by the Council, the Prime Minister was first approached for this lecture. When he did not accept this commitment, Shri Narasimha Rao was approached. He accepted the commitment, but because of the General Elections, the date of the lecture had to be postponed to Feb 90.

LECTURES

The following lectures were organised by the USI during 1989 :-

- | | | |
|---------------|--|---|
| (a) 28 Feb 89 | Changing Pattern of International Relations. | Dr Peter Hardi,
Director Hungarian
Institute of Foreign
Relations. |
| (b) 10 Mar 89 | Prospects on Sri Lanka | Shri JN Dixit,
Indian High Commissioner
in Sri Lanka |

- (c) 17 Mar 89 Operations in the Desert-1971 Brig YP Dev (Retd)
Ex Col GS
12 Inf Division
- (d) 19 Apr 89 Naval Operation in the West - 1971 Vice Adm
GM Hiranandani,
PVSM, AVSM,
NM (Retd)
Ex VCNS
- (e) 21 Apr 89 East-West Relations Dr. V. Vekarie
Director of the
Yugoslavian Centre for
Strategic Studies,
Belgrade.
- (f) 23 Aug 89 Air Operations in the Western Sector during 1971 Indo-Pak War Air Marshal CV Gole,
PVSM, AVSM (Retd)
Former Dy COAS and
AOC-in-C South Western
Air Command
- (g) 29 Sep 89 Land Operation in the Western Sector-1965 Lt Gen ZC Bakshi,
PVSM, MVC,
Indo-Pak War "Haji Pir VRC, VSM (Retd)
Pass Operation" Former GOC II Corps
- (h) 23 Nov 89 Equilibrium in West Asia Prof Nissán Oren,
Chairman, Department of
International Relations,
Hebrew University,
Jerusalem.
- (j) 28 Dec 89 1971 Operations in Chhamb Lt Gen RK Jasbir Singh,
PVSM (Retd)
Ex GOC 16 Corps.

Gold Medal Essay Competition There were fairly large number of entries for both the categories - open to all officers and the other restricted to officers of the rank of Major or equivalent rank below ten years service. The Senior Directing Staffs of the NDC very kindly officiated as judges. Unfortunately, none of the entries were found upto the standard for the award of the gold medal but were recommended only for cash awards. These are-

- (a) **Employment of Indian Armed Forces (Open to all officers) - 14 entries**
 - (i) **First - Award of Rs. 2,000/-**
Brig PK Pahwa
BGS, DSSC Wellington

- (ii) Second - Award of Rs. 1,000/-
Commander CT Joseph, IN, INS Kadmatt

(b) India's Role in the Context of Indian Ocean Security. (For officers 10 years service) -15 Entri

- (i) First - Award of Rs. 2,000/-
Lt Sanjay Jasjit Singh, IN, INS Veer
- (ii) Second - Award of Rs. 1,000/-
Capt H Dharamrajan
3 Engineer Regiment

The first two prize-winning Essays are being published in the Oct-Dec 89 issue of the USI Journal. The other two will be published in the next issue. Instructions for the 1990 Gold Medal Essay Competition are being issued shortly.

Library. The Library continues to be used by a large number of researchers. We have not yet been able to procure a computer for the library as the Air Force share of the grant has not as yet been received.

USI BUILDING PROJECT

In spite of the many promises and assurances given at various levels, the case is still held up with the Ministry of Defence. I am sorry to say that since our last meeting, there has been no progress in the allotment of land to the USI.

CONCLUSION

From all that I have said, it is quite patent that during 1989 the USI has continued to maintain the progress it had shown last year. At the same time, I must emphasise that the Institution is fast reaching the optimum standards of development that is possible within the constraints imposed by the cramped accommodation it presently occupies. It can start expanding to its full potential only when it now gets suitable accommodation. Towards this end it is vital to get the allotment of land, that has already been recommended and earmarked for it by Army HQ, so that the new building project can be started at the earliest.

A Military Policy for the Nineties

LT GEN A M VOHRA, PVSM (RETD)

Since the end of the Second World War we have seen the disappearance of empires. The age of occupation of territory of conquered had come to an end. Political consciousness of the people of the areas won by war would make such occupation untenable and the pressure of world opinion would not permit it. Wars are therefore no longer profitable and the economy of the victor also suffers a set back. Secondly, even wars restricted to conventional weapons cause vast loss of civilian population and property of the countries involved. What is now accepted wisdom in respect of nuclear weapons war, viz, a nuclear war cannot be won and must never be fought, is applicable to conventional weapon conflict also with a slight modification: in a conventional war the victor also suffers human loss of such magnitude as also an economic set back that it is best to avoid it by adopting the course of conflict resolution by negotiation. This is a major change in the concept of military power. The clauzewitzian dictum that war, is a continuation of policy by other means and seeks to destroy the adversary's military power, conquer his country and subdue his will has been outdated. The military factor is still important but as a deterrent. There is a change of emphasis in the role of the armed forces ; the emphasis is on deterrence as opposed conquest and occupation of territory.

ARMS BUILD UP

Although war is no longer a practical instrument of policy, the period after the Second World War has been one of intensive arms build up in keeping with the traditional concept of military power ; the pursuit of military superiority. Both the super powers and various regional adversaries have indulged in competitive build up ; higher force levels and sophistication of weapon systems as well as introduction of innovations in newer fields. All this has resulted in mounting and uncontrolled defence spending as upkeep of modern armed forces and the periodic replacement of obsolescent weapon systems have become intolerably expensive. In case of India, for instance, the defence budget has gone up from 1100 crores in 1970/71 to 4651 crores in 1981/82 and 13000 crores in 1988/89.

Despite increased expenditure, which has brought many nations to the point of bankruptcy, the objective of military superiority is not achievable as no country is willing to be left behind in military strength in relation to its likely adversary. The result is a competitive build up; an arms race.

Let us look at the economic health of India. Budgetary deficits are now so high that the government has started borrowing to meet deficit even on the revenue account.¹ Apart from public borrowing, a part of the budget deficit has come to be met by creation of money by the government to discharge that part of its monetary obligations which cannot be met from revenue or borrowing. The growth rate of money supply in the economy over the last 10 years has been of the order of 16 to 17 per cent. This is to be put against GDP growth rate of around 5 per cent in real terms which is much too low to absorb the growth of liquidity.² The government has not been able to provide the public sector the kind of budgetary support it needs to sustain its planned programme of investment. The adverse impact of this will be seen in a year or two in the shape of infrastructure bottlenecks. On the other hand, non-development expenditures burgeon.³ Inflation is being stoked by monetary pressures generated by governments deficit financing. Meanwhile external debt has continued to mount, the amount of debt having risen from Rs. 36,000 crores at the end of March 1985 to Rs. 70,000 crores by June 1989.⁴

SUFFICIENT DEFENCE

National budgets in many countries have been strained by spiralling defence expenditure. In view of this economic compulsion and the changed concept of military power, Gorbachev propounded the strategy of sufficient defence; sufficient to deter aggression, which, by its non-provocative nature would halt the arms race and reduce defence expenditure. In his book *Perestroika*, Gorbachev says that it is time for East and West "to amend their strategic concepts to gear them more to the aims of defence. We believe that armaments should be reduced to the level of sufficiency; that is a level necessary for strictly defensive purposes".

In the wake of the historic INF treaty signed on Dec. 8, 1987, (the first disarmament as opposed to an arms limitation treaty in that it eliminated a category of nuclear weapons) there were reports that the Soviet Union is making changes in its strategic thinking to one of defence. A Washington report of early 1988 referred to observations by US experts that "Soviet military theoreticians and high ranking officers no longer talk about a blitzkrieg against NATO in Europe and the use of such terms as "superiority" in reference to military strength has given way to expressions such as parity and military sufficiency".

The Russian compulsion was greater. Faced with internal discontent with the standard of living and non-availability of consumer necessities, the Soviet Union under Gorbachev's leadership has had the courage to change

priorities. To implement this change, drastic reduction in defence spending is essential. The USSR is, therefore, taking measures to adopt the strategy of low level deterrence and of resolving conflicts by negotiations. Afghanistan, Angola, Cambodia, Namibia and Nicaragua are cases in point.

To prove his bonafides, Gorbachev announced unilateral reduction of Soviet armed forces by 500,000 troops and a large cut in conventional weapons in the next two years while addressing the UN General Assembly on Dec. 7, 1988. He undertook to withdraw and disband six tank divisions from East Europe (50,000 troops, 10,000 tanks, 8500 artillery systems and 800 combat aircraft). The withdrawal commenced on April 24 from Hungary and on July 1 from Poland to be followed by GDR.

During his visit to China in May 1989, the Soviet Leader outlined plans to cut the forces deployed in Asia by 200,000 in the years 1989 and 1990, including 120,000 on the Chinese border. The USSR will be pulling back twelve army divisions and eleven airforce regiments which are to be disbanded. 16 Warships are to be withdrawn from the Soviet Pacific fleet and 436 intermediate and short range missiles are to be eliminated.

These unilateral steps have had some impact. The Vienna talks on reduction in the conventional forces in Europe (CFE), resumed in March, were purposeful with both NATO and WTO agreed on large scale reductions. Talks on 50 per cent reduction of strategic nuclear forces were also revived in June. The logic of reduction both in nuclear and conventional forces is compulsive and the technicalities of verification are by no means insurmountable. Differences have been further narrowed during September 1989 Shevardnadze's talks with President Bush and negotiations with Secretary of State Baker. At these negotiations the Soviet Union has dropped the linkage between a strategic arms treaty and space war. Experiments and tests in space are to be permitted. Observing the provisions of the 1972 ABM treaty is however to be insisted upon. In this connection, the USSR has agreed to dismantle the Krasnoyarsk radar. There was agreement to bring about a global ban on chemical weapons.

The USA would also like to reduce its defence spending. "It is widely agreed that the US has invested too many resources, financial, technological and scientific on defence to be able to maintain its lead in civilian industry, that it must reduce this expenditure if it is to have a reasonable chance of getting rid of budget and trade deficit and that, therefore, it too, like the Soviet Union, needs respite from the cold war and the accompanying arms race." It is therefore very likely that an agreement on CFE and strategic arms reduction may be signed during the spring/summer 1990 Bush-Gorbachev Summit.

GLOBAL ENVIRONMENT

The 1979-89 decade has seen a marked change in the global environment from confrontation in the early 1980s to negotiations by the end of the decade; from cold war to detente and from hostility to prospects of cooperation. The detente in the Nixon era was short lived. The present development has come about as a result of a fundamental change in the concept of military power as also of momentous political developments in the USSR and Eastern Europe.

At a conference on "The Place and Role of Eastern Europe in the Relaxation of Tension between the USA and USSR" held on July 6-8, 1988 in Alexandria, Virginia, sponsored by the US-USSR commission on Humanities and Social Sciences of the American Council of Learned Societies and the Academy of Sciences of the USSR, the paper presented by the Russian delegation admitted that "the administrative state model of socialism, established in the majority of East European countries during the 1950s under the influence of the Soviet Union, has not withstood the test of time, thereby showing its socio-political and economic inefficiency". It stated that "today, the socialist countries of Eastern Europe are at a turning point in their development - a turning point characterised by societal understanding of the compelling necessity to change radically the political and economic structures and to undertake profound reforms in all spheres of life".

The refreshing development of glasnost permitted a forecast of shape of things to come in Eastern Europe. In the recent months we have seen fundamental changes in Hungary, Poland, Czechoslovakia and GDR. Eastern Europe is in the process of "undertaking profound reforms in all spheres of life" mentioned in the foregoing paragraph, with encouraging support of the Soviet Union. Secondly, as mentioned earlier, the super power confrontation in Afghanistan, Angola, Cambodia, Namibia and Nicaragua have been subjected to negotiations and are in the process of being resolved. In these circumstances of detente, threats arising out of super power confrontation recede. One could therefore say that there is no military threat to India's security in the foreseeable future as a spillover of super power confrontation.

In South Asia, one aspect of the problem in regard to security issues is that India is suspect of hegemony. Because of its size and its perceived military power, it's neighbours are apprehensive. Even assistance given at specific request as the IPKF in Sri Lanka and the para operation to save the Maldivian government being over thrown by mercenaries, is sited as evidence of the charge only because such assistance is indicative of India's

relative military prowess. Currently, concern is being expressed about the growth of India's "Blue Water Navy" and the testing of intermediate range missile Agni. For instance, Pakistan's Prime Minister, Benazir Bhutto voiced her concern in London on July 6, when talking to the editors of leading British Newspapers and repeated it to 'The New Strait Times' Kuala Lumpur on Oct 16. Again on Oct 20, at Kuala Lumpur, during CHOGM, she said that these measures are causing concern to all India's neighbours. On all these occasions, she proposed arms control talks with India to prevent an arms race.

INDO-PAK RELATIONS

Indo-Pak environment has improved since the establishment of a democratic government after the November 1988 elections. In her talk with British editors mentioned earlier, Ms Bhutto summed up Indo-Pak relations appropriately when she said that tensions, have softened. Mr. Rajiv Gandhi's visit to Islamabad in Dec. '88, on the occasion of the SAARC Summit, the first visit by an Indian PM in 30 years (Jawaharlal Nehru visited Pakistan in 1959 to Sign the Indus Water Treaty) was the occasion for signing three agreements including one on not attacking each others nuclear installations. The long term importance of the second, the cultural agreement on visits by academics, artists and exchange of books/periodicals is also of considerable long term importance.

Large number of people in both countries talk about goodwill for the other country as well as hospitality and friendship. However, there is also another aspect, the deep suspicion on national security issues. Secondly, there is the fact of the complexities of internal politics in both India and Pakistan. The accusation by the IJI of Benazir Bhutto being soft on India is an example. This forced her to cancel her visit to India in Aug, as Chairperson of SAARC even though the Indian PM Rajiv Gandhi made a stop over on July 16/17. But for the fact that the political parties not in power in Pakistan would use any settlement of the J and K issue on more or less the present defacto position to unseat the party in power this problem would not be intractable. Its present manifestation in the form of dispute over the Siachen glacier will take time to resolve even though India and Pakistan have agreed "to work out a comprehensive settlement" based on "redeployment of forces to reduce the chances of conflict, avoidance of use of force and determination of future positions on the ground so as to conform to Shimla agreement." Complicated issues of the delineation of the line of control from NJ 9842 and the redeployment of troops facing each other are involved.

Militarily both Siachen glacier and the Karakoram highway are of significance in relation to Ladakh only. Without gainsaying the considerable political importance of both, it needs to be emphasised that in the unlikely event of Indo-Pak war, the outcome will depend on how the armed forces fare in the areas of manoeuvre in Sind-Bhawalpur/Rajasthan. Operations in the mountainous terrain of J and K will be slow moving and inconclusive.

A look at the Indo-Pak military strength shows that India continues to have an edge. As per figures in the Military Balance 1988/89 published by the IISS London, the Indian Army's order of battle is 2 armoured 1 mechanised and 20 infantry divisions against Pakistan's 2 armoured and 17 infantry divisions. Over and above this India has 11 mountain divisions for the northern border. Major item of weapons wise, India has 3150 tanks (650 x T72, 800 x T55 and 1700 Vijayanta) against Pakistan's 1600 tanks (these include 450 x M47/48 and 1100 Type 59 Chinese tanks). India has 700 MICVs (BMP) and 450 APCs as against Pakistan's 800 APCs.

The IAF has 714 combat aircraft whereas Pakistan has 338. India has 1 light bomber, 25 FGA, 13 Fighter and 3 reconnaissance squadrons making a total of 42 combat squadrons. Pakistan has 8 FGA, 11 Fighter and 1 reconnaissance Squadron that is a total of 20 squadrons.⁷ (The 1989-90 Military Balance just received shows India with 863 combat aircraft and Pakistan with 451).

The Indian Navy was somewhat neglected earlier and is being gradually built up now. With a coastline of 7000 Kilometers and an EEZ of 2.5 million sq. km the naval strength of 2 aircraft carriers, 5 destroyers, 21 frigates (a total of 28 principle surface combatants) and 17 submarines is by no means excessive. Pakistan, which has a small coastline and only one port really has no aircraft carriers, 17 destroyers/frigates and 6 submarines.⁸ Both India and Pakistan are adding to their naval strength. India's Defence Minister, Mr. K.C. Pant, said on November 21 at New Delhi that the Indian Navy had grown from a small coastal navy to a well balanced three dimensional ocean going force. This growth, he said, has to be seen in the context of India's growing maritime interests and the developments in the Indian Ocean region. India had no extra territorial ambitions whatsoever, he said.

There is talk also about India's force projection capability. "India already has a demonstrable rapid reaction, heavy and long range air-inserted force capacity. Within the next five years, its area of power projection will be well into the Western end of the Persian Gulf and to the Eastern reaches of the ASEAN states. This will be able to be supplemented by strong naval

force projection, in selected operations, at quite long distances including the Indonesian Choke points".⁹ In fact, the Indian ethos supports a defensive strategy of sufficiency and does not visualise use of military force except in self defence. All the same, as a result of competitive arms build up, the level of forces has been going up. There is therefore considerable merit in Benazir Bhutto's repeated urgings for arms control talks. In this connection, it needs to be understood that arms control does not imply equality of forces as the needs and requirements of India and Pakistan are different. India, for instance, has its northern Tibetan border as well as a large border in the east in addition to its western border with Pakistan.

Arms limitation talks assume particular significance as war is no longer a viable option. The differences with Pakistan do not portend hostilities. Under the Zia regime, Pakistan adopted the low profile, low cost course of weakening India's national power by supporting terrorism in Punjab and Kashmir which it is persisting with. This is in keeping with the changed concept of military power and is the likely pattern of threat on India's western front.

SINO-INDIAN AFFAIRS

The middle kingdom has, over a period of time, moderated its views on its place in the world. It has also tempered its bellicose rhetoric. In the 1960s, and early 70s, it was seen as a predominant force among those committed to changing the status quo. However, the failure of the "Great Leap", the chaos in the wake of the cultural Revolution and the difficulties arising out of the rift with the USSR have made it look inwards, anxious to achieve political stability, integration and economic development. Externally, it has moved from confrontation with the super powers to normalising relations with both. Internally, its priorities are the four modernisations. Lately, with the objective of improving the standard of living, measures have been adopted that take cognisance of market forces and the policy of economic regimentation has been liberalised. These economic steps call for political changes which are being resisted but one wonders for how long. Be that as it may, on the international plane, the Chinese Prime Minister, Li Peng, said in his report at the Second Session of the National People's Congress on March 20, 1989, "International situation is at a turning point from confrontation to dialogue; from tension to relaxation" "Today, the prospects of world peace are more encouraging than ever before."

Rajiv Gandhi's visit to China from Dec 19 to 23, 1988 broke the spell of estrangement that had predominated Sino-Indian relations for some time. Chairman Den Xiaoping referred to the visit of Jawaharlal Nehru in 1954

and said, "We should... make a new beginning in our relationship. It is our common wish to forget the past unpleasantness and to look forward.... a genuine start in improving relations has begun with your visit". Prime Minister Li Peng referred to the fact that India and China were the initiators of the five principles of peaceful coexistence and said that we should bring about a sound development of our relations on the basis of these. The joint communique stated that it was agreed to develop relations in other fields to create a favourable climate and conditions for a fair and reasonable settlement of the boundary question.

The joint working group on the boundary settlement has been vested with sufficient authority to recommend a concrete solution. It has also been made responsible for maintaining peace and tranquility on the border. At its first meeting held at Beijing from June 30 to July 4, the group reaffirmed its determination to maintain peace pending settlement of the border dispute.

During his recent visit to Pakistan, Bangladesh and Nepal from Nov. 15 to 21, Li Peng reiterated at Islamabad that the bonds of friendship had been strengthened and the ties between the two countries had returned to normal with the visit of the Indian Prime Minister, Mr. Rajiv Gandhi, "This observation was repeated at the Kathmandu Press Conference on Nov 21. Asked at the Islamabad press conference on Nov 16, whether China would standby Pakistan in case there were hostilities with India, he said, such a situation was "highly hypothetical and will not come true." On the Kashmir dispute, he said there was no change in China's stand of non-interference in the internal affairs of other countries. Commenting on the Siachen issue, he said that the two countries should thrash it out through friendly consultation.

These observations and responses highlight the downgradations of the military option and the changed global environment. The emphasis on solution of the Indo-Pak problems by negotiation and the assertion of improved Sino-Indian relations reflect the recognition of these developments by China.

The question of India's security concerns in its relations with Nepal needs to be seen from the aspect that China's objective is to make Nepal a buffer state. It will therefore not transgress Nepalese territory. Whereas Indo-Nepalese security is indivisible in that a threat to Nepal is a threat to India, it is suggested that there is no threat of a military ingress to Nepal from China.

Even in the unlikely event of hostilities between India and China, the

objectives are likely to be peripheral and not deep inside the others territory. The Siliguri corridor is one such peripheral objective with strategic significance in that its capture would cut the land link to eight eastern states (Assam, Arunachal, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura). Similarly, a peripheral objective for India could be the Demchok-Radok Section of the Lahsa-Xinjiang highway; accessible from Leh and Poo in the Western Sector of the Sino-Indian border. There would, of course, be military engagement all along the border, but the Nepalese border is not likely to be transgressed.

An analysis of the military posture will show that both India and China have improved their preparedness and potential on the Tibetan border. China's logistical capabilities have increased. A 1940 km long road Qinghai-Tibet was completed in October 1984 : 240,000 tons of goods are moved on it yearly. A 1970 km long product pipeline has been completed as also a 683 km long section of railway line with Lahsa still 1150 km away. (Section completed is Haiyen in Qinghai to Golmod) In view of the distances from mainland China along various routes and the terrain, logistics continues to be problematic. For instance, inspite of the pipeline, aviation fuel has to be trucked from Golmod taking 2 to 4 weeks depending on the airfield supplies.

Military deployment wise Tibet (Xizang) falls under South West Chengdu Military Region (MR) which has an orbit of two Group Armies (GAs equivalent to a Corps) of 10 infantry divisions. Tibet is one of the four military districts of Chengdu MR. Therefore, the number of regular Army divisions in Tibet may be only 2 or 3. However, China has a force of 29 border internal defence divisions. The deployment of these is no longer given in the normal published sources. In the early eighties, Chengdu MR was shown to have six local force and two to three border divisions under it. The likely force in Tibet is therefore 2 or 3 regular Army divisions plus 2 or 3 local/border divisions. In case of hostilities, there would be additional formations from the Western Lanzhou MR in Xinjiang and the southern Gunghzhou MR in Yunan.

China has carried out reduction in its armed forces from about 4 million in the early eighties to about 3 million in the late eighties. In the same period the strength of the Army has been brought down from 3,150,000 to 2,300,000 and from 12 armoured and 119 infantry divisions to 10 armoured and 80 infantry divisions. The bulk of this strength continues to be deployed in the MRs bordering the Soviet Union and Mangolia. (North Eastern MR with HQ at Shenyang which has 5 GAs, the Northern MR with HQ at Beijing with 6 GAs and the Western MR with HQ at Lanzhou with 2 GAs,

that is 13 GAs out of a total of 24 including 4 GAs in the Central Jinan MR as the reserve).

India's deployment on the northern border is about 8 divisions from Ladakh to Arunachal with two more divisions available as reserves in the eastern sector. In addition to these 10 divisions there are local forces in the way of scouts battalions. (In 1962 there were only two divisions available in Arunachal, then called NEFA. Now, the northern sector, that is Sikkim and Arunachal has eight divisions including reserves). These forces are now organised, armed and trained to fight at high altitudes. Infrastructure wise there has been a good deal of improvement both in road communications, helipads, signal communications and administrative units. Thus, in every respect, India is better prepared militarily with the IAF in a position to play a dominant role. This is how it should be because credibility of the deterrent continues to be relevant even if the environment does not indicate any possibility of Sino-Indian hostilities.

THE NUCLEAR ASPECT

Now, a few words on the nuclear aspect. China has been a nuclear weapon state (NWS) since Oct. 1964. At that time her relations with both the USA and the USSR were strained. Since the early 1970s, with the normalisation of relations with the USA, the USSR has been her main security concern and her nuclear weapon capability has had the primary objective of deterring the USSR. Even with the prospects of friendly relations with the Soviet Union, China will continue to update her strategic nuclear forces as her deterrence apparatus. All the same, there is no reason to doubt her assurances that, firstly, she will not be the first to use nuclear weapons and, secondly, she will not use nuclear weapons against a non-nuclear weapon state.

In the Indo-Pak context, the position is well summed up by The Schaffer Testimony (Howard Schaffer, Deputy Assistant Secretary of State for north eastern and south Asian affairs, testified on March 8, 1989, on the issue of continued US Assistance to Pakistan). He said that "the reality in the subcontinent is that for Pakistan as well as India, the barrier to acquisition of nuclear weapons is now political not technical..... We believe that neither India nor Pakistan has irrevocably crossed the nuclear threshold by deciding to acquire nuclear arsenals."

Both India and Pakistan are considered covert NWS with a few crude bombs in the basement as well as air delivery capability. However, neither has carried out any nuclear militarization in the way of military training

in nuclear weapon environment or reorganisation of conventional forces for operating in this environment or the development of C3I. Therefore, any talk of a surprise nuclear weapon sortie is unrealistic. Nuclear weapons are not, in any case, weapons of war but rather of coercion or blackmail and even that is partially relevant in respect of another NWS.

The present situation of ambiguity is likely to continue and has its advantages. Firstly, a situation of nuclear weapon deterrence infact exists between India and Pakistan. Secondly, a covert NWS can only have a small limited arsenal. Going overt, would open the flood gates of competitive build up. If India does not go overt, Pakistan is not likely to do so. In her August 29 interview to Agence France Presse on this issue, Ms Bhutto said, "We do have the knowledge but, I think there is a difference between knowledge and capability and we do not, in the absence of any threat, intend to use that knowledge." She added that "any one sided action in the sub-continent can trigger off a nuclear arms race".

Having signed a treaty not to attack each others nuclear installations, India and Pakistan (both covert NWS) should sign an agreement banning use or threat of use of nuclear weapons against each other and invite China and USSR to sign this treaty also. This would be in keeping with India's role towards delegitimisation of nuclear weapons universally.

MILITARY POLICY FOR THE 1990s

The prevailing global environment of detente and conflict resolution by negotiations rules out regional hostilities as a spill over of super power confrontation. Equally, a look at the regional situation from India's point of view, in particular of security vis a vis China, Pakistan and Nepal, indicates that differences are not only manageable diplomatically but that India and its neighbours are anxious to solve these peacefully; a resort to hostilities is not likely. The low key threat to weaken national power by supporting insurgencies or sub-ethnic uprisings will continue. Internal political solution is the requirement to deal with such threats to national security.

It can also be stated that defence preparedness wise, India's deterrence is credible. Of course obsolescence of weapon systems and modernisation of armed forces are an ever continuing process. Equally, reforms are necessary in the organisational fields of both national security and defence management. This is a wide subject relevant to this paper which merits a separate analysis.

In the context of the threat perception in the 1990s, the changing concept of military power and the consequent downgradation of the military

option, the military policy of the country should be one of low level deterrence. In this connection arms control talks with Pakistan and discussions regarding deployment of troops at a rational level on the Sino-Indian border are important steps.

This policy of low level deterrence will make it possible to control defence expenditure. It can be no one's case that India should be niggardly in regard to defence spending. Nor can it be said that the health of the economy of the country should be ignored. Whereas the objective of ensuring security against military threat to the territorial integrity of the country must not be compromised, it is not necessary either to pursue military power beyond the requirements of security since India would not, to quote K. Subrahmanyam, feel justified in using military force for any purpose other than self defence.¹⁰

Whereas the healthy development of the strategy of sufficient defence makes it possible to control expenditure, the only change in the role of the armed forces is that of emphasis. The armed forces must therefore continue to be well manned, well armed and well trained.

The changed concepts of military power will take time to be fully absorbed and acted upon. Exponents of security strategies continue to visualise worst case scenarios and military adventures by likely adversaries. They advocate the concept of achieving military superiority so as to be able to practise coercive diplomacy even if an outright invasion is outdated. Not to do so is criticised as lack of will to power. A self criticism often heard is India's unwillingness to exercise power. For a country that rushed forces by air at less than 24 hrs notice to defend Jammu and Kashmir in October 1947 and ordered its Army in September 1962 to evict the Chinese from Dhola, an allegation of unwillingness to exercise power is as inappropriate as the counter allegation of aggression.

The traditional objective of the pursuit of superiority has been tried for the last several decades. This has resulted only in raising the level of forces. In the Indo-Pak context, for instance, the strength, of their respective armies have risen from 10 : 8 divisions in 1963 to 23 : 19 in 1988, (Indian figures exclude mountain divisions) that is both armies have more than doubled their strength; relative strength ratio, however stays, more or less the same.

It needs to be understood that such security measures that make one's likely adversaries apprehensive should be avoided or explained. The objective should be equal security, for security in the changed concept of military

power is indivisible. This calls for arms control talks so that the perceived needs of the countries of the region can be explained and understood.

NOTES:

- 1, 2 and 4 B.M. Bhatia, "Eighth Plan has to be Scrapped". The Times of India, November 17, 1989, Page 8.
3. Editorial, The Times of India, November 17, 1989, Page 8.
5. Girilal Jain, "After the Cold War", Times of India, Oct 19, 1988.
6. Agreement at defence secretaries talks held at Islamabad 15-16 June 1989.
7. These figures are also from The Military Balance 1988/89 published by the IISS London in September 1988 and form a reasonable basis for comparison.
8. The Military Balance 1989-90.
9. Gregory Copley, Editor-in-Chief, Defence and Foreign Affairs, "Inevitable India, Inevitable Power", December 1988. With a sqn of IL-76, the IAF can field long range armour lifting capacity. The IAF will take delivery of two of a larger order of An-124 transports within 18 months.
10. K. Subrahmanyam, "Is India a Bully"? Hindustan Times, Oct 23, 1989.

RATES - USI Journal

By Air Mail					By Sea Mail				
Subscription			Postal charges	Total	Subscription		Postal charges	Total	
£			£	£	£		£	£	
1 year	8.00	+	5.00	13.00	8.00	+	2.50	10.50	
2 years	15.00	+	10.00	25.00	15.00	+	5.00	20.00	
3 years	22.00	+	15.00	37.00	22.00	+	7.50	29.50	
4 years	29.00	+	20.00	49.00	29.00	+	10.00	39.00	
5 years	35.00	+	25.00	60.00	35.00	+	12.50	47.50	

Subscription			Postal charges	Total	Subscription		Postal charges	Total
\$			\$	\$	\$		\$	\$
1 year	16.00	+	8.00	24.00	16.00	+	4.00	20.00
2 years	30.00	+	16.00	46.00	30.00	+	8.00	38.00
3 years	44.00	+	24.00	68.00	44.00	+	12.00	56.00
4 years	58.00	+	32.00	90.00	58.00	+	16.00	74.00
5 years	70.00	+	40.00	110.00	70.00	+	20.00	90.00

Higher Defence Organisation in India

AIR MARSHAL ML SETHI, PVSM AVSM (RETD)

INTRODUCTION

The higher defence organisation of a country is concerned with the formulation of policy and management of its defence machinery to ensure attainment of national objectives. Defining these is the role of the political authority while their achievement is the task of the Defence Forces. Therefore, there is close relationship between the political leadership and the defence forces in any country and its nature is determined by the system of Government. In a democratic set up the political machinery plays a dominant role so that the armed forces function according to the will of the people as symbolised by the Chief Executive of the Government. In a totalitarian state the political authority would be eclipsed by the military. In between these two systems we may have various shades of control. In every system, however, there is a need to define and establish this relationship which will be reflected in the type of higher defence control organisation existing in the state.

We inherited a parliamentary type of government in 1947 which was retained on adoption of the new constitution. Our higher defence organisation was established towards the end of 1947 to meet the requirements of an independent democratic state. During the last 47 years remarkable progress to meet the demands of a free dynamic society has been achieved. In public administration also there has been considerable advancement but our higher defence organisation has remained static. In fact the institutionalised mechanism for higher defence control has not been allowed to function effectively and is in danger of withering away.

BACKGROUND

With the advent of independence, defence of free India became the responsibility of its elected Government. The Minister of Defence assumed full responsibility for the enunciation of the defence policy of the country and administration of her armed forces. The Commander-in-Chief was replaced by three Commanders-in-Chief of the Army, the Navy and the Air Force. Defence of India became the only concern of her armed forces instead of being a subsidiary force contributing to the demands of a foreign power. Determination of proper organisation for direction and control of the defence forces became one of the immediate tasks of the new

government. A new organisation for higher defence control was approved based primarily on the committee system as prevalent then in the U.K. It catered to the basic requirement of control of the military by the political authority.

The ultimate responsibility for defining Defence policy and control of defence forces rests with the Cabinet which is collectively responsible to Parliament. To enable the Cabinet to shoulder this responsibility, on 30 Sep, 1947, it was decided to form Defence Committee of the Cabinet (DCC) with the Prime Minister as the Chairman and the Deputy Prime Minister, the Finance Minister and the Defence Minister as members. Other Ministers were to be co-opted as necessary. The DCC dealt with all important matters relating to defence policies and reported to the Cabinet on crucial issues. The heads of the three Services along with Defence Secretary and the Financial Adviser (Defence) were in attendance in all meetings of the Committee which was served by the Military Wing of the Cabinet Secretariat. The Defence Committee of the Cabinet functioned till 1962 when it was replaced by the Emergency Committee of the Cabinet which in turn gave way to the Cabinet Committee on Internal Affairs. This was later superseded by the Cabinet Committee on Political Affairs (C.C.P.A.). The secretarial assistance of this committee is provided by the civil wing of the Cabinet Secretariat and the presence of Service Chiefs in attendance is infrequent even when matters relating to Defence are discussed.

In line with the D.C.C., the Defence Ministers Committee was formed with the Defence Minister as Chairman and the heads of the three services, the Defence Secretary and the Financial Adviser(Defence) as members. In September 1959, the Defence Minister's Committee was bifurcated into the Defence Minister's Committees (A) and (B). The Defence Minister's Committee(C) was set up in September 1960. Committee (A) dealt with plans and papers on Defence subjects other than those pertaining to welfare, cantonment and works, while committee(B) decided on all matters relating to welfare of personnel, lands and cantonments, and Committee(C) dealt with matters relating to works and construction for all three services. In 1970 the Defence Minister's A, B & C Committees were abolished but the Defence Minister's committee was retained. Meetings of the Defence Minister's Committee became infrequent later in the sixties but worse fate was to follow in mid 1974; it has not met even once since then. In July 1949, the Defence Ministers Committees for the Army, the Navy and the Air Force were established but these were abolished sometimes in the sixties.

The Chiefs of Staff Committee was reconstituted in 1947 with the three Service Chiefs of Staff as members to offer collective advice to the

Government on military matters; the Chief who had held the office longest was appointed as the Chairman. In their capacity as the Chiefs of Staff Committee, the heads of three services were responsible for military planning and thereafter for implementing the plans as approved by the Government. The C.O.S.C. is the highest professional body which advises the C.C.P.A. normally through the Minister of Defence and provides an interface between the political and military elements of the Government.

In addition to the D.M.C. and the C.O.S.C. a few other Committees were also formed in Dec 1947. These were the Principal Personnel Officers Committee and the Principal Supply Officers Committee under the D.M.C. and the Joint Planning Committee, the Joint Administrative Planning Committee and the Service Communications Committee responsible to the C.O.S.C. To strengthen the operational planning machinery, an additional whole time committee, the permanent Joint Planning Committee, was constituted under the C.O.S.C. in 1962 but it was disbanded after three years. The Joint Training Committee and the Medical Services Advisory Committee were two other important committees which were formed in 1948.

The Joint Intelligence Committee (J.I.C.) was established in 1947 under the C.O.S.C. to provide assessments of political, economic and military developments which may have a bearing on the security of India. It included representatives of the Ministries of External Affairs, Defence and Home as well as the Directors of Intelligence of the Army, Navy and the Air Force. In 1965, the J.I.C. ceased to be a sub committee of the C.O.S.C. and was placed under the Cabinet Secretary.

Mr. YB Chavan who took over as the Minister of Defence in 1962 started a daily meeting with the three Service Chiefs, the Cabinet Secretary, the Defence Secretary, the Secretary Department of Defence Production and Additional Secretaries of Defence and Defence Production, to discuss important developments. The frequency was later changed to once a week and the Scientific Advisor was also included as a member. No agenda is issued for these meetings and no formal papers are presented; any matter having a bearing on defence may be covered.

An addition to the higher defence organisation, is the Committee for Defence Planning (CDP) set up in 1978 under the Chairmanship of the Cabinet Secretary with the Service Chiefs, Secretary to the Prime Minister, the Defence Secretary, the Foreign Secretary, the Finance Secretary, Secretary Defence Production and Secretary Planning Commission as members. The CDP is conceived as an apex body to integrate planning for defence and national development.

The formation of various committees in the defence control organisation constituted an important step towards expeditious disposal of business. They were not intended as a substitute for discussion on files but were designed to ensure that no time was wasted in deciding important issues. They were also conceived as links between the political authority and the military top executive so that personal contact and rapport so essential for understanding each other's point of view could be achieved. Above all, the organisation was designed to achieve proper coordination between the three services and the Ministry of Defence, and quick reaction in emergencies.

HOW DOES IT WORK ?

The Cabinet Committee on Political Affairs is the highest decision making body on national defence and functions under the overall guidance of the Cabinet. It is a compact body adequately represented to deal with all matters of defence. Papers for consideration of the CCPA are put up by the Ministry of Defence with comments by other concerned Ministries and the Secretary, Ministry of Defence is in attendance when these are scheduled but the Chiefs of Staff are not always invited to attend the meetings of the CCPA concerning defence. This is a serious lacuna whereby expert military advice is not available first hand to the CCPA. Moreover in the current organisation there is no forum wherein advice by a broad cross section of Defence experts can be provided to the C.C.P.A. The Defence Council which was established after 1962 crisis was a right step in this direction and needs to be revived.

The organisation established in 1947 envisaged that the Defence Minister (RM) would be advised by the Ministry of Defence, Services Headquarters and RMs Various Committees. In reality this system does not function in the planned manner. The D.M.C. has been dormant since 1974 but not yet dead. Papers from Service Headquarters are scrutinized on files at various levels according to routine bureaucratic procedures with associated red tape and built in delay. The Minister does not get professional advice directly from the services. He receives watered down version through the Ministry's Secretariat. There is no formal forum where the Service Chiefs can directly interact with the political executive and are therefore relegated to the position of one of the many to tender advice. This arrangement is certainly not in line with the following statement of the Defence Minister in the Lok Sabha in March 1956, "There is the Defence Ministers Committee. The Minister presides and the three Chiefs of Staff go with their senior officers and our civilian officers all assemble and whenever there are any questions of importance to all the services these questions are considered and decisions taken. In addition we have (got) three other Committees presided over by

the Defence Minister. One is the Army Committee, the other, Air Committee and the third, the Naval Committee. I suggest that these are equivalent to the Army Councils and when we examined all these three existing committees we thought that it was not necessary to take the trouble of appointing the Army Council on the British model".

The Defence Ministers weekly meeting cannot substitute the D.M.C.; the latter was a formal committee in which papers were considered and decisions taken, the former is merely an informal body for considering current developments which have a bearing on defence. It is not equipped for deciding major issues.

The Defence Ministry's role which should have been primarily that of coordinating with other ministries of the government has been altered over the years. The Defence Secretary has become the Chief Coordinator of the three services and in fact the chief adviser to the Minister of Defence. The Ministry has taken on the mantle of super headquarters of the Services with service headquarters as subordinate offices. The Administrative Reforms Commission aptly commented in 1967 that "The subordination of military to the civil power should be interpreted in the political and not in bureaucratic sense. There is the factor to consider seriously of duplication of work which constitutes a waste, both financial and in terms of talent and time. Such duplication occurs mostly in the name of coordination and supervision ; it contributed little except delay".

The Ministry has remained a vetting organisation for proposals which are initiated by the service headquarters without any original contribution of its own. This is inherent in the current set up in which the service headquarters function independently outside the government and the Ministry is staffed with civil generalists who may be from the Administrative, Railway, Revenue or Postal service. A civil servant with hardly any defence background is considered fit to hold an appointment in the Ministry while a service officer irrespective of his training and background is denied this position. Obviously there is a serious need for better services-civil servant relationship and also a need for better interaction between the politicians and the services at all levels of decision making. This can be achieved if the service headquarters are merged with the Secretariat of the Defence Ministry. Establishment of the Defence Council and Service Boards as integral parts of the Ministry of Defence could be considered for this purpose. This could achieve rationalisation in role of the service chiefs who presently have too much responsibility with extended span of control. Decentralisation in the policy making at the top level in the services is necessary as there has been frequent criticism that the policies decided by service headquarters were altered with the change of the chief.

The Committee for Defence Planning has been established for examination of the defence plans and their coordination with the national plan. In the present mode of functioning, the CDP has taken on the task of scrutinising the operational requirements of the Defence Services. Whilst the need for proper co-ordination with the National Plans and tailoring of Defence Plans within the available national resources cannot be denied, the examination of the operational requirements of the services is strictly the purview of the Defence Minister's Committee. Had the Defence Minister's Committee been allowed to function the way it was conceived, there would have been no need for the CDP. Ideally, the DMC should function as statutory council to advise the CCPA on all defence matters, with appropriate inputs from the Chiefs of Staff who should have a comprehensive perspective planning joint staff under them for formulation of long term defence plans. The Defence Planning Staff established for this purpose about four years back but presently languishing for want of support needs to be rejuvenated.

The case for establishment of permanent Chairman of the Chiefs of Staff Committee or the Chief of Defence Staff (C.D.S.) has been projected frequently. It could be based on the pattern existing in the Western countries or on the lines of the Chief of General Staff of the Soviet Union. In the former set up he deals with the political authority on behalf of the Defence Services but normally does not enjoy command functions; the Chiefs of individual services are responsible for operational preparedness and employment of their forces. They retain the right of direct access to the political executive. The C.D.S. system leads to dual responsibility, split loyalty and ambiguity in Command and control. It has little advantage over the system prevalent in India. The C.G.S. System akin to the Soviet pattern is more effective since he has command and control of all forces under him. But concentration of so much power and authority in one individual is unlikely to be acceptable politically in our democracy. It is suggested that in order to achieve proper coordination and closer link between the defence services and the RM and officer of three/four star rank be appointed secretary of the Defence Council and the C.O.S.C. He should have adequate staff for taking over the entire responsibility of the Military Wing of the Cabinet Secretariat.

RECOMMENDATIONS

1. The Cabinet Committee on Political Affairs as constituted at present is a compact and competent body at the highest level. The Chiefs of Staff, however, should always be present during deliberations of matters related to defence.

2. Additionally, the CCPA should have the benefit of broad-based advice from non-officials on all major policy matters for which the Defence Advisory Council should be revived.
3. The organisation and role of the Ministry of Defence and Service headquarters need a major change both in content and responsibilities of various departments.

Service Headquarters should be merged with the Ministry of Defence as Army, Navy and Air Force Departments. Civil Servants, military officers and scientists should function independently in their respective spheres in the integrated organisation and conjointly in the Council/board. Civil servants would thus be associated with formulation of proposals at all stages and not confine themselves merely to their scrutiny. Their role would undergo a major change in the Ministry with responsibility for financial management and coordination with other Ministries.

4. An apex body, the Defence Council should be set up under the chairmanship of the Defence Minister. It should supercede the D.M.C. with the additional responsibility of coordinating Defence plan with the National plan; the C.D.P. may be wound up.
5. In addition to the Defence Council, Single Service Boards be established under the Chairmanship of the Minister of State for Defence to deal with exclusive individual service matters. The Service Chief, all principal staff officers of the service and Secretary Ministry of Defence should be members of this board. All major decisions regarding the service would be taken by the Board with full participation of the political executive.
6. The C.O.S.C. should continue to function as the highest professional body but its deliberations be confined to operational matters.
7. For coordination between the service as also between the RM and the services, an officer of three/four star rank in rotation from the three services be appointed Secretary of the Defence Council and the C.O.S.C. He should act as an aide to the RM with the responsibility of overseeing all interservices committees. The Military Wing of the Cabinet Secretariat be transferred to the Ministry of Defence.

Disarmament and Development

DR. T T POULOSE*

The Biblical saying, "beating swords into ploughshares" is an apt description of disarmament and development. The trilogy, "affluence, armaments and poverty" would provide the contrast to study thematically disarmament and development. We have already witnessed or known so much of structural, institutional, inter-State and international violence largely attributed to these contradictory situations obtaining in human society.

A brief statistical survey would give us a glimpse of the stark realities arising out of this three-dimensional problem. According to Robert McNamara, 27 rich nations possess 75 per cent of the world's wealth, though they have only 25 per cent of the world's population. Similarly, since 1958, 87 per cent of the very poor nations, 69 per cent of the poor nations and 48 per cent of the middle income nations suffered serious violence.⁽¹⁾ Today, the annual world military expenditure is \$1,000 billion. Since the second World war, the arms race has eaten up over \$20,000 billion while the world output has increased only by \$8,600 billion. Significantly out of the 130 odd armed conflicts which took place since the end of the Second World War, 95 per cent have occurred in the Third World.⁽²⁾

Out of a world population of about 5 billion, more than 1 billion are under-nourished, 1.4 billion without safe drinking water, 1.4 billion without adequate medical care, 800 million without a roof over their head, 800 million illiterate, and about 40,000 destitutes dying every day out of poverty and hunger.⁽³⁾ The two Development Decades had only sharpened the dichotomy between "private opulence and public squalor and aggravated North-South confrontation".⁽⁴⁾ The industrialised, developed countries of the North share 80 per cent of the world military burden and 20 per cent is shared by the poor nations. The debt burden of the Third World has already crossed the \$1,000 billion mark. Despite this "debt trap" some of the Third World nations are vigorously pursuing a policy of arms import. The more expensive nuclear weapons options apart, other equally expensive and sophisticated conventional weapons capability including missiles technology are also part of this dynamic "security through arms" policy.

Thus, the rich and the poor nations have been equally guilty of excessive military spending. There is also a global concern about poverty

* Professor in the Centre for International Politics, Organisation and Disarmament, School of International Studies, Jawaharlal Nehru University, New Delhi.

and squalor that exist in the Third World in particular. Willy Brandt, Chairman of the Independent Commission on International Development Issues poignantly referred to this serious problem in the following words: "...mankind may well face a threat in the decades ahead of us not only from uncontrolled arms race, but also from the shocks emanating from a growing or unchanging differential, between poor and rich countries. But if serious efforts are undertaken to curb a further rise in the arms spending in the coming decade, that will give rise to the important question of re-channelling resources. Firstly, within the national economies but also, I trust, over and beyond that in helping to bridge the gap between North and South."⁽⁵⁾ Despite vigorous arms control efforts since the conclusion of the Partial Test Ban Treaty in 1963 and the INF Treaty in 1987, the world economy is shackled to excessive military spending. With a \$300 billion defence Budget which is about one fourth of the total federal spending, even the US economy is affected by the defence burden. It is evident from high interest rates, budget deficits, sluggish economic growth etc. The Soviet economy is under much severe strains due to reckless defence expenditure to the tune of 14 to 17 per cent of its GNP.

However, today when we begin to consider the question of disarmament and development, it is worthwhile to remember that there is an emerging consensus about the need to tackle global poverty and underdevelopment by a concerted effort of all nations specifically in reducing military spending and re-channelling these financial and other resources into civilian sectors and in the form of economic assistance to the LDCs. Thanks to Gorbachev, the political climate has dramatically taken a favourable turn and the US-Soviet relations have improved so much beyond recognition of the era of the Cold War confrontation and irreconcilable antagonism. As the cold War is receding, the prospects for more meaningful strategy of disarmament and development are also brightening. This is clearly evident from the 150 nation international conference on the relationship between disarmament and development held in New York in 1987. The conference reaffirmed its commitment to disarmament and stated :

Resources released as a result of disarmament measures should be devoted to the promotion of the well-being of all peoples, the improvement of the economic conditions of the developing countries and the bridging of the economic gap between developed and developing countries. These resources should be additional to those otherwise available for assistance to developing countries.⁽⁶⁾

CONCEPTUAL PROBLEM

There are at least three conceptual problems directly related to the

theme of disarmament and development. The *first* is undoubtedly the *linkage* problem. Apparently disarmament and development are two distinct problems. These are unconnected historically, at least from the experience of developed nations. Perhaps, armaments and development, instead of underdevelopment went hand in hand and were complimentary in the outward-looking, expansionist economies of the imperialist, and colonial powers who made good use of their more sophisticated and over powering weapon technology for annexation, conquest, foreign markets raw materials and cheap labour. Their tremendous economic growth and affluence cannot be attributed to disarmament. As the UN Group of Experts on Economic and Social Consequences of Armament and Disarmament observed, "fundamentally, they stand separately from one another."⁽⁷⁾ The UN Conference on Disarmament and Development, 1987, admitted that "they are distinct processes".⁽⁸⁾ Yet, their intrinsic connection becomes evident from the most deplorable social and economic conditions prevailing on the periphery of affluent society. "Every gun that is made, every warship launched, every rocket fired signifies in a final sense, a theft from those who hunger and are not fed, from those who are cold and not clothed", said US President Eisenhower many years ago. There lies the symbiotic relationship between disarmament and development.

In fact it is the United Nations which pioneered the study of *linkage* between disarmament and development. The 3-year study by a Group of 27 Experts from every continent of the world, headed by Inga Thorson, set up by the UN went into every minute detail of the linkage problem. Presenting the Report of the Group of Experts to the United Nations, Inga Thorson said :

"..... Governments have, over the past 30 years, spent vast resources on armaments, resources which - on grounds of morality, equal human injustice, enlightened self-interest-ought to have been directed to ending world hunger and building for human and material development."^{(8)(a)}

Similarly, disarmament and development may appear sequential. It looks as though development has to wait until disarmament takes place. But it need not be so. As the UN Studies, including the Final Document (1987) of the International Conference on Disarmament and Development, made it amply clear "the pursuit of each objective can proceed without the other, and it should proceed urgently."⁽⁹⁾ Significantly, though "poverty had always been man's lot"⁽¹⁰⁾, never before in human history was there such a global concern for concerted action to attack poverty.

The *second* conceptual problem is about the security-through-disarmament dilemma. Security has been understood for long as military-

orientated and hence security-through-disarmament has been an accepted norm. Even the UN Charter affirmed this general position through its provisions providing for minimum armaments for national security, right to self-defence and collective security.

Robert McNamara, in his book *The Essence of Security* defined security as development and development as security.⁽¹¹⁾ This radical view of security was not acceptable to the Third World in the thick of the Cold War. Today, there is an attempt on the part of the poor nations to visualise several non-military threats to their security. Most of these are inherent in the domestic situation within each State and are responsible for the endemic political and economic instability of many Third World countries. As Inga Thorson observed in her Report on the linkage between disarmament and development, referred to earlier, the concept of security needs redefinition in view of the innumerable non-military threats to national security. She specifically referred to threats to national security by :

- reductions in the possibilities for economic growth ;
- ecological stresses on the Earth's environment ;
- resources scarcities, particularly in energy and non-renewable resources ; and
- a growing world population explosion.⁽¹²⁾

Conceptually, security is still armament-based. Every state policy in a realistic sense is based on the concept of security through armaments. As long as nation states are predicated on the sanctity and use of force, the international system remains conflict-oriented. The concept of disarmament remains from this point of view a wild Utopia. Yet the breath-taking developments which led to the conclusion of INF Treaty and the current negotiations for deep cuts (50 per cent) of the strategic arsenal of the Super Powers clearly demonstrate that yesterday's Utopia can become today's reality. From 4 per cent to 50 per cent cut (if and when it takes place) cannot be treated as incremental. There are therefore valid reasons to be optimistic about the prospects for reductions in armaments of the most expensive and dangerous categories. It is this dream that provides the incentive to development strategies. Super Power perspectives about armament-based security are changing. To quote Inga Thorson again :

The assumption that security can be reinforced by the acquisition of a great number of more sophisticated weapons has increasingly begun to be questioned in both East and West. Armaments have become an onerous economic burden, not least for the Super Powers. The

fulfillment of important social and economic needs, so important for the stability and security of nations, has been sacrificed to the arms race. Military expenditures are an important component of the large and growing budget deficits which, in effect, mortgage the disposable resources of future generations. Deficits have also contributed to high interest rates which affect the debtor countries of the Third World particularly severely.⁽¹³⁾

The *third* conceptual problem is about the development model. According to Mary Kaldor, "development pre-supposes the possibilities of transforming Third World countries from a state of rural poverty to one of urban wealth and it implies that this transformation can be engineered by the ruling institutions and/or external agents."⁽¹⁴⁾ The World Bank recommends the GNP/per capita growth model. Robert McNamara says: "Security is development and without development, there can be no security..... Development means economic, social and political progress. It means a reasonable standard of living....."⁽¹⁵⁾ The centrally-planned Marxist model of development, obviously derived from the dominant class-exploitation and class-analysis approach refers to a stage of development at which the norm will be "to each according to his needs and from each according to his ability." Gandhiji's development model consists of "ever-widening, never-ascending circles" of "self-reliance and mutuality, with a view to providing the necessities of all, in which every man or woman knows what he or she wants, and what is more, knows that no one should want anything that the others cannot have with equal labour and in which there is no room for machines that would displace human labour and that would concentrate power in a few hands."⁽¹⁶⁾ Then there is the structuralist model whose primary goal is the redistribution of income and wealth for the social benefit of the poor.⁽¹⁷⁾ This is not the occasion to go into these complex problems of development as that job requires competence of a different kind. Suffice it to say that the central theme on which there is unanimity is that development is to be basically "poverty-centred". The major focus of the UN studies on the economic and social consequences of arms race and military expenditures has been the social and economic development of all nations, especially the Third World where more than two-thirds of the world's population leads a miserable life.

STRUCTURAL DUALISM: RICH VERSUS POOR WITHIN STATES

Most of the developing nations adopted a pattern of development for rapid industrialisation and modernization which resulted unfortunately in the distortion of economic and social priorities and consequent aggravation of poverty, due to deliberate negligence of "critical dimensions of the power structure of the society, bureaucratic structure of the State, the distribution

of educational opportunities and the nature and orientation of dominant elites.”⁽¹⁸⁾ Consequent on the heavy reliance on the borrowed models of growth, a “structural dualism” is widely prevalent in many Third World countries, consisting of the exploited poor and the exploiting affluent rich. In view of the “structural dualism” in some countries it has “posed a rising threat to stability and social integration while also constituting a major disincentive to popular participation in development implementation.”⁽¹⁹⁾

As “structural dualism” is widespread in the Third World, a development perspective appropriate to a need-based economy is to be evolved expeditiously. Such a development plan requires a radical restructuring of the present economies and a reordering of the social and economic priorities in order to ensure social justice, equity and individual security against poverty and hunger. In other words, a total change in the direction of development in the Third World is needed to provide the critical necessities and to satisfy the basic aspirations such as a roof over their heads, food, clothing, education, medical facilities and better hygienic conditions for the poorest quarter of the world's population. The changed economic perspective for development will enable to formulate a new, effective and positive development strategy to wipe out poverty. Instead of the present indiscriminate import of capital-intensive high-technology and other instruments of production by the developing nations, the new development strategy will also decide about the exact nature of appropriate technologies for development.

STRUCTURAL DUALISM : RICH VERSUS POOR NATIONS

The problem of structural dualism exists not only within States but also in the international system between nations. The great divide between the rich and poor nations and the consequent affluence and waste on the one hand and the squalor and misery on the other, reveal the grotesque disparities. The distribution pattern, an eye opener to the glaring inequality in the economic growth, is as follows :⁽²⁰⁾

1. One million people in the 28 poorest nations generated only \$130 billion of annual product (GNP) or a per capita average of \$140.
2. Less than half a billion people in the 25 rich countries created \$ 2,876 billion of gross product (GNP) or \$6,820 per capita average.
3. Between the two extremes were first the 40 countries with the largest population, numbering 1,295 million, producing less than \$500 billion GNP or an average per capita of \$350.
4. Next 50 countries with 576 million people producing less than \$600 billion GNP or around \$ 1000 per capita.

5. Thirty countries with 650 million people with a total GNP of \$2,000 billion or more than \$3,000 per capita.

If we divide the world population on the basis of the average level of economic development, the dichotomy between the rich and poor nations becomes very clear :

(a) there are some 3 billion poor people with an average per capita income of \$400 ; (b) there is over one billion with an average per capita income of \$6,000. Thus the "economic distance" or the "income gap" between the rich and the poor nations is 1 : 15.

Another study by Wassily Leontieff, *The Future of the World Economy*, says that while the per capita income of the lower ranks of the developed nations would go up from \$1,700 to \$4,000 by 2,000 A.D., the corresponding increases in the least developing nations will only be from \$153 to \$240.

The least developed among the developing nations (LDS) have an average per capita income which is far less than the above-mentioned figures. According to Tinbergen's Report for the Club of Rome, some 900 million people subsist on an average per capita income of less than \$75 and of these 650 million live in absolute poverty on incomes of \$50 or less. The ILO Report to the World Employment Conference estimated that there were some 700 million destitutes in the world and one third among them are children.

Of the total labour force of some 700 million people in the developing nations, 40 per cent or about 300 million people are unemployed or under-employed. The technology gap between developed and developing nations is in the order of 1 : 50.

THE REMEDIAL STEPS

While the UN-sponsored Conference on Disarmament and Development in 1987 made proper diagnosis of the various problems ailing the economies of the developing nations as a result of the arms race, there was no consensus on the setting up of an international machinery. However, there were suggestions that multilateral disarmament can create a pool of funds for development assistance. The US Nobel Laureate for Economics, Professor Lawrence R. Klein, for instance, said that an attractive proposition to help the Third World is to "bring multilateral disarmament and use the monies saved to create a fund for international capital transfer to developing countries in order that they might expand productive facilities, raise productivity and contribute to extra non-inflationary growth." ⁽²¹⁾ He also

observed that if the US and NATO and the USSR and WTO agreed to bring about multilateral disarmament, \$50 billion per year could be generated for development assistance. There has also been suggestion for budgetary reductions of the militarily significant countries from time to time. The Soviet Union had been proposing at the UN for a 10 per cent cut in the military budgets since 1973. Evidently, it is not due to the lack of resources available that global poverty has not been eliminated.

If the World Bank figures are any guide, the basic needs of the poorest quarter of the world's population can be met with approximately \$125 billion⁽²²⁾ over a period of 10 years. If a development assistance fund, set up partly through budgetary reductions suggested on the lines of the Soviet resolution of 1973⁽²³⁾ and through contributions of the more affluent, petrodollar rich developing countries, the World Bank target is easily attainable. This will be only 4 to 5 per cent of the yearly world military expenditure. But the political will was indeed lacking so far.

As political atmospherics have improved, and the Cold War tensions are disappearing, there is fresh optimism about the materialisation of such a development assistance fund. The North-South and the South-South dialogues are in progress. It is important to realise that the "demand for disarmament and development on a global scale is an integral element of the wider demand for the restructuring of the international system and can gather momentum and force only as a part of the global political movement of the Third World nations".⁽²⁴⁾ Similarly, the threat to international peace and security can arise not merely from a nuclear war but also from the more explosive, structural violence germane to an exploitative international system.

The Non-aligned countries proposed in 1974 that a new International Economic Order (NIEO), the "millennium" of the poor nations based on equity, sovereign equality, interdependence, common interest and co-operation among all States, irrespective of their economic and social systems, should be established, in order to eliminate the widening gap between the developed and the developing countries and accelerate economic and social development and peace, justice for the present and future generations.

There is one final point about disarmament and development. That is about *conversion* from military to the civilian sector, as disarmament actually takes place. According to one authority, "conversion can be defined as a process, whereby financial, labour and material resources are re-distributed between the civilian and the military spheres, and a shift is effected in the course of disarmament from munitions manufacture and other related activities to peaceful production through the drafting, planning

and implementing relevant economic, organizational, technical and other measures.”⁽²⁵⁾

Inga Thorson, the head of the Group of Experts, recommended in her report on *The Relationship Between Disarmament and Development*, that a council for disarmament and conversion and central fund linked to this council should be set up.⁽²⁶⁾

INDIA'S ROLE

India has been the moving spirit and an active participant in the World Conference on Disarmament and Development. In fact, as early as 1950, India proposed at the UN for the establishment of a peace fund for development of the underdeveloped areas to be financed from savings effected by the reduction of armaments and from other sources. Until the Chinese war on India in 1962, India was one of the Third World countries spending the lowest per cent of its GNP (less than 2 per cent) for defence.

Consistent with this stand, India stated at the World Conference on Disarmament and Development in 1987 that the developing countries “(a) reaffirm their commitment in the fields of both disarmament and development and reiterate their determination to adopt appropriate measures to implement these commitments ; (b) recognise the all too obvious reality of the relationship between disarmament and development and the need to ensure an effective and mutually reinforcing relationship between these two processes ; (c) give practical shape to the relationship through specific measures at all levels ; (d) reaffirm their commitment in principle, to allocate a portion of the resources released through disarmament for development particularly of the developing countries : (e) undertake to give consideration to the establishment of an international financial mechanism to facilitate such transfers.”⁽²⁷⁾

With the hindsight of history, we know that the Indian stand on disarmament and development, non-alignment and the new international economic order are the lasting contribution of Pandit Jawaharlal Nehru though he was often misunderstood as a visionary and Utopian idealist. Like Woodrow Wilson and Franklin D. Roosevelt, he was a prophet among statesmen. His economic and foreign policies corroborate this view.

As Galbraith aptly said : “.... the problems of an affluent world which does not understand itself may be serious and they can needlessly threaten the affluence itself.”⁽²⁸⁾ But how to generate the political will and avoid a world catastrophe ? As one Third World scholar observed : “Demilitarisation of the mind is a necessary pre-requisite of demilitarisation of world regions.

Without the former, even if some de-escalation of the arms race took place, there is no guarantee that it would not soon be reversed. Similarly, the struggle for autonomy and equity must be waged in the minds of men as well as in concrete situations of encounters between power and resources."⁽²⁹⁾

Charity begins at home. Hence, India should once again seize the initiative to set up a development assistance fund, like the AFRICA FUND. India should also try to reduce its military spending to set an example to other Third World nations engaged in arms competition. Through active diplomatic initiatives, India can reduce risks of arms competition with Pakistan and even with China. This will ensure the reduction of any threat to India's security while taking such unilateral steps. Only then, as Gandhiji dreamt, tears can be wiped out from the eyes of every "daridra-narayan" (poor man). Otherwise, the slogan, *Garibi Hatao* (remove poverty) would sound hollow.

NOTES

1. Robert McNamara, *The Essence of Security* (London, 1968) p. 146.
2. See SIPRI Yearbook, 1988 (London, 1989) ; Ruth Leger Sivard, *World Military and Social Expenditure, 1988* (Virginia, 1988) ; *Disarmament for Development* (New Delhi, 1989).
3. Sivard, Op. cit. ; *Disarmament for Development*, Op. cit.
4. J.K. Galbraith, *The Affluent Society* (Harmondsworth, 1962) p. 73.
5. A Balance Between North and South. Paper presented to the Discussion Group on Economic Affairs and Politics at the Friedrich-Ebert Stiftung, 20 September 1978. Also see, Galbraith, Op. cit. p. 283.
6. International Conference on the Relationship Between Disarmament and Development, New York, 24 August-11 September 1987, *Final Document* (New York, 1987) p. 6.
7. See Regional Colloquium on *Disarmament and Arms Control*, New Delhi February 12-17, 1978 (New Delhi, 1978) p.13.
8. *Final Document*, Op. cit. p. 2.
- 8a. *Disarmament*, vol. IX, No. 1, Spring 1986 (New York, 1986) p. 65. Also see *Relationship Between Disarmament and Development* (UN Publication, Sales No. E. 82, ix, 1)
9. Report of the Preparatory Committee for the Special session of the General Assembly Devoted to Disarmament, Vol. IV. General Assembly Official Records, Tenth Special Session, *Supplement* No. 1 (A/5-10/1) p. 139. Also see *Final Document*, Op. cit., p.2.
10. Galbraith, Op. cit. p. 73.

11. Op. cit. p. 140.
12. Douglas Roche, "Spotlighting the Disarmament-Development Link" *Disarmament*, vol. ix, Spring 1986, Op. cit. p. 67.
13. Inga Thorson, "The Relationship Between Disarmament and Development" : The Swedish Follow-up Study, *Disarmament*, vol. ix, no. 1, Spring 1986, Op. cit. p. 87.
14. Richard Jolly (ed). *Disarmament and Development* (Oxford, 1978) p. 53.
15. Op. cit.
16. See, Rajni Kothari, *Footsteps Into the future* (Delhi, 1974) p. 109.
17. Nicole Ball and Milton Leitenberg, "Disarmament and Development : their inter-relationship". *Bulletin of Peace Proposals*, 1979 (3), p. 251, Richard Jolly, Op. cit. p. 58.
18. Kothari, Op. cit. pp. 52-53.
19. UN Publication E/CN.5/445 (1969).
20. Janez Stanovnik, *Towards the New International Economic Order* (Beograd, 1979) pp. 111-15.
21. Lawrence R. Klein, "Disarmament and Socio-Economic Development," *Disarmament*, vol. ix, no. 1, Spring 1986, Op. cit. p. 55.
22. Richard Jolly, Op. cit, pp. 97 and 108.
23. See, SIPRI Yearbook, 1978, "The Link Between Disarmament and Development," p. 308.
24. Jayantyanuja Bandhyopadhyaya, "Disarmament and Development : Structural Linkages," *Alternatives*, vol. iv, no. 1, July 1980, p. 34.
25. *Disarmament for Development*, Op. cit. pp. 60-61.
26. *Disarmament*, vol. ix, no. 1, Spring 1986, Op. cit, p. 86.
27. Statement by C.R. Gharekhan, Permanent Representative of India to the United Nations, August 26, 1987, p. 6.
28. Galbraith, Op. cit. p. 16.
29. Kothari, "Disarmament, Development and a Just World Order" *Alternatives*, vol. iv, (1978-79) p. 7.

Employment of Armed Forces as a Political Instrument *

COMMANDER C T JOSEPH NM IN

As per Lt General Eric A Vas (Retd.) 'History is the raw material of strategy, and human beings act in the light of collective memory of communities and societies. Any remembered event may influence current action. If the historical background of the present is not kept in view, the later is likely to become an insoluble puzzle.¹ Therefore, we shall examine our subject viz 'The Employment of Armed Forces as a Political Instrument' with a look into the history of the evolution of the military power and its growth into the present pattern of politico-military set up.

THE PAST

In the past, the military as well as the political authority was combined in one individual, namely the King or the Emperor. He took the political decision and executed it himself, through military actions. As the head of the state he personally went to battle-fields and conducted the war. Alexander the Great, Caesar, Chengiz Khan, Shivaji and Napoleon are examples of this category. However, in the Indian history you would find an exception to this general rule. In the 4th century B.C. the Mauryas had a large empire with a large Army and a, comparatively smaller Navy. According to Magasthenese, the Greek Ambassador in the court of Chandragupta Maurya, the management of the Army and co-ordination between the two defence services, viz the Army and the Navy, were carried out by the supreme war council, consisting of the heads of six departments working under the Commander-in-Chief who was, of course, subordinate to the Emperor.² It is generally believed that with Napoleon there ended the era of concentration of political and military authority in one person.

THE PRESENT

The present day pattern of the civil-military relations took birth during the American civil war. President George Washington carried out the duties of both the President as well as the Commander-in-Chief. President Abraham Lincoln appointed General Grant as his General-in-Chief and placed complete faith in his military commander. It would be appropriate to quote here

* This essay won the second prize in group 'A' of the USI Gold Medal Essay Competition 1988-1989

President Lincoln's instructions to General Grant immediately after his appointment as General-in-Chief. "You are not to decide, discuss, or confer with any one or ask political questions, such questions the President holds in his own hands and will submit them to no military conferences or conventions". General Grant promptly replied, setting the tradition and barriers for the political military relations of the future world democracies :- "So long as I hold my present position, I do not believe, I have the right to criticise the policy or orders of those above me, or give utterance to the views of my own, except to authorities in Washington".³ Thus the present day civil-military relationship was born.

CIVIL MILITARY RELATIONSHIP

Though, by the beginning of the First World War supremacy of the civil over the armed forces was established in most of the countries, it was only during and after the Second World War the present day pattern of Civil-Defence control was evolved and put into practice. With the establishment of democracy in most of the countries, the military leaders soon accepted the authority and supremacy of the civil politicians.

However, it was not always smooth sailing between some prominent statesmen and their Generals. Controversies between Lord Curzon, the Viceroy of India and his Commander-in-Chief Lord Kitchener, British Prime Minister Lloyd George and his CIGS, General Sir William Robertson and the American President Truman and General MacArthur are the three major ones which rocked the Political-Military relations in the present century.

DEFENCE POLICY - A BRANCH OF NATIONAL POLICY

"Defence is probably the most intricate single branch of Public Policy of any kind, even in a complex world of today. It is closely related to a nation's external policies and, in some countries, internal politics may also depend on it" says Air Vice Marshal John Downey⁴. Today's war is not restricted only to the battlefields. The whole nation is involved in it. Therefore, the problems faced by the Armed Forces cannot be separated from the National Problems. The problems cannot be compartmentalised into two different categories, viz political problems to be handled by Politicians only, and Military strategic problems to be solved by the Generals, Admirals and Air Chief Marshals. The great Prussian Military thinker Clausewitz, by defining war as the continuation of the political activity has indicated the close relation and continuity between the National policy and the defence policy. In other words, a war starts as a result of a stalemate

in the political games played by the political leaders of the involved countries and the Armed Forces are used as an instrument to achieve the ultimate aims of the National Policy. Therefore, it follows that the Armed Forces have been constituted and kept ready to be used as specialised instruments of National policy in very special circumstances only. National humiliation, loss of National honour and destruction of men and material will be the fruits of complacency and unpreparedness on the part of Armed Forces during peace time which we have already tasted during the Chinese aggression of 1962.

This brings home the necessity for constant consideration of National Security aspects, war preparedness and updating of military strategy even during peace time. Thus the political and military leaderships have to be closely knitted and they form the two main pillars of National policy which decides the deployment of the Armed Forces for internal and external security or even for mercenary purposes abroad.

NATIONAL SECURITY POLICY AND DECISION MAKING PROCESS IN INDIA

FORMULATION OF POLICY

The historical background, socio economic relations, majority religion and the cultural heritage of two neighbouring countries play a great deal into the formation of the security policy of one nation with respect to the other. For example memories of the blood bath and civilian violence during the partition of India and the existence of Islamic fundamentalistic feelings in Pakistan will always obsess the Defence policy makers of India for many years to come. The Pre-Independence political philosophy has much influenced the post-independent defence policies. The non-alignment and panchsheel policies of Nehru era were infact a continuation of the Gandhian principles of non-violence to achieve political ends. Nehru's idealistic vision that National security would be better achieved through professions of peaceful co-existence and diplomacy rather than arms build up, cannot be termed 'successful' after the Chinese and Pakistani attacks on India. As Air Marshal RD Sahni (Retd.) says : "Historically our response to aggression has been defensive..... Punishing the aggressor through counter aggression just does not appear to be a part of our national response, no matter how deep the injury to our national pride or how high the cost in human and economic terms. Pakistan and China continue to enjoy the fruits of their aggression against us, while we continue efforts to be-friend them. No other nation has shown such forbearance. Little wonder that we have been fair games for aggressors for centuries. This must change".⁵

Yes, the humiliating defeat inflicted by the Chinese in 1962 has in fact started the ball rolling. It brought home the point that a Nation's foreign policy and defence policy cannot flourish independently but both have to be interdependent. It produced a defence awareness amongst our political leaders as well as the people. Armed Forces and the defence production were given better attention. Keeping within the terms of non-alignment, Nehru, Lal Bahadur Shastri and Mrs. Indira Gandhi cultivated and promoted a foreign cum defence policy which resulted in the Soviet Union becoming the main supplier of defence equipments to India and further leading to signing of a treaty of friendship between India and the Soviet Union in Aug 1971.

In addition to the historic, Socio cultural and religious factors, Indian Security policy is more influenced and shaped by the prevailing political atmosphere in the country. This was amply demonstrated by the shift in Defence policy by the Janata Government which came to power in 1977. The new government redefined the policy of non-alignment and preferred western made defence equipments. By the end of 1979 Mr. Charan Singh took over as the Prime Minister and the new government's foreign policy of non-alignment took a turn towards Nehru's out look. This was made clear by the Defence Minister Mr. C. Subramaniam in his address to the students of the National Defence College New Delhi, in Oct 1979, when he declared that his government's practice of non-alignment was not different from that followed by Nehru and a nation can be non-aligned only in other nations' rivalries and confrontations. He added that no nation can be non-aligned in respect of the nation which threatens its security or vital national interests.⁶

DECISION MAKING PROCESS

Having seen the main factors influencing the National security policy formulation, let us now discuss the actual process of decision making with regard to the deployment of Armed Forces and the execution of military plans. We shall restrict our discussions to important committees at various levels. No effort is being made here either to bring out the advantages, disadvantages and lacunae in the present system or to put forward any proposals of additions and alterations.

THE STRUCTURE

The structure of the defence decision making system essentially consists of three levels of participants; political, bureaucratic and military and in that 'hierarchical' order. Cabinet Committee on Political Affairs (CCPA) is the highest political level committee in decision making structure and it takes decisions on external and internal security problems and issues. The

committee is chaired by the Prime Minister. The Defence Minister, the Finance Minister, the External Affairs Minister and the Home Minister are its members. In addition, the three services Chiefs and the Secretaries to the Government will be in attendance of this committee when required. While taking major decisions this committee takes into consideration the prevalent political atmosphere, the views of opposition parties and the various debates in both the Houses of Parliament. Taking inputs from a broad range of participants the committee is expected to provide more balanced economic and political planning.

On the bureaucratic middle level we have the Defence Planning Committee (DPC) headed by the Cabinet Secretary. Its members are secretary to the Prime Minister, the Secretaries of Defence, Defence production, External Affairs, Finance and the Planning Commission and the three Chiefs. Unlike in the other major democratic countries, in India the Ministry of Defence consists of purely civil servants and functions separately from the service headquarters. Therefore, often the poor relationship and lack of proper understanding between the service headquarters and the civil bureaucracy affects the middle level decision making process.

At the bottom of the hierarchy we have the Chiefs of Staff Committee (COSC) consisting of the three service Chiefs and headed by the senior most service chief. The three service chiefs are the three Commanders of the three services and simultaneously the principal military advisers to the Defence Minister in respect of their respective services. The three Chiefs propose various programmes for their services and once approved are responsible for executing them.

The process of making and executing the defence policies and proposals, takes place at all the three levels discussed above. Though, policy making and allocation of funds and other resources involve all three levels, the final decision remains entirely with the top political level and thereafter the execution will be the responsibility of the two lower levels. Thus, it could be seen that the deployment of the Armed Forces where external or the internal security is involved or for that matter wherever national policy, prestige and national honour are involved the decisions are taken by the top level political committee.

THE EMPLOYMENT OF ARMED FORCES IN INDIA

OUT DOOR MISSIONS

"The primary task of an army is to defend its country's frontiers. That is its *raison d'être*." Since independence Indian Armed Forces fought four

major wars to defend India's territorial integrity. Though, the performance of the Indian Armed Forces during the 1962 Sino-Indian conflict was not very laudable, three years later they recovered the lost honour in the 1965 second Indo-Pak war and the prestige of the Indian Armed Forces reached its peak after the 1971 military victory over Pakistan.

Even at a fast deteriorating political situation between India and its neighbours, the deployment of the Armed Forces in an offensive role is a deliberate and much considered political decision. As Mr. K. Subrahmanyam says 'Security perceptions and the steps necessary to counter them are, part of the wider sphere of foreign policy and are not a matter for military commanders to settle.'⁸ This would be further evident from the two statements of the Prime Minister of India on the eve of Indo-Pak War of 1971. On 14 Nov 1971 Mrs. Indira Gandhi stated in Parliament "Even though Pakistan has declared an emergency, we shall refrain from a similar step, unless further aggressive action by Pakistan compels us to do so in the interest of national security. In the meantime the country should remain unruffled. The rulers of Pakistan must realise that the path of peace, of peaceful negotiations and conciliation is more rewarding than that of war and the suppression of liberty and Democracy"⁹ Soon after the midnight of 3rd/4th Dec 1971 the Prime Minister addressed the nation and declared, "Today the war in Bangladesh has become a war on India. This has imposed upon me, my government and the people of India a great responsibility, we have no other option but to put our country on a war footing. Our brave officers and Jawans are at their posts mobilised for the defence of the country"¹⁰.

AID TO CIVIL POWER

The Armed Forces' secondary role - first the Army and where there is no army unit then the other two services - is to provide aid to the civil authorities when called upon to do so. The decision to request for aid from the Armed Forces entirely rests upon the civil authorities of the state administration and at no stage the Armed Forces will replace the civil power. The Armed Forces could provide aid in the form of force for the maintenance of law and order, in the form of expertise to run the essential services and in the form of men, material and other resources during natural calamities. During the partition the civil administration in many of the districts of Northern India collapsed and the Indian Army was called in to run most of the administrative services. To quote a few data of the Army deployment in aid to civil power, in various states of India during a more recent period, from June 1979 to December 1980, the Army was called out for the maintenance of law and order 64 times, to man the essential services 7

times, to provide relief to the suffering millions during natural calamities or disasters 46 times and for other purposes 159 times¹¹.

To avoid the frequent use of the Armed Forces for maintenance of law and order the Central government has raised many para military forces to be deployed when the state administrations request for additional force. Whenever the Armed Forces are employed for maintenance of law and order the soldier should remember that he is not fighting against an enemy but his own people and that he should avoid taking political sides and should use minimum force with impartiality.

The nature has not been very kind to India. Natural disasters in the form of floods, famines, cyclones, train accidents etc. affect the progress of the country frequently. During such calamities the loss of life and loss or damage to property are heavy. Due to non-availability of resources and lack of proper management capabilities, state governments or the local administrative bodies would not be geared up to provide timely relief. The need of the hour would be high speed of action and high standard of logistics. The speedy flow of relief measures to the affected area is a main factor in disaster relief operations. Indian Armed Forces have the managerial ability and organizational capability to come to the rescue and aid of the needy people and they are involved in such philanthropic work every year.

COUNTER INSURGENCY

Today insurgency is an accepted form of warfare that most of the Armed Forces of the World are destined to fight against. In almost every democratic country, insurgency movement of varying intensity has been going on. Not even the super powers have been spared this cancerous disease. A decade long counter insurgency operations by the United States of America, the most powerful country in the world, in Vietnam and the humiliations and the heavy loss of life inflicted upon it by the Vietnamese form part of recent history.

By no chance, is insurgency or Guerrilla Warfare is of recent origin. History has recorded guerrilla form of Warfare from 4th Century B.C. onwards. China, Vietnam, Algeria, Britain, Spain all had their share of insurgency. Today it is a common problem for most of the developing countries. Some of the ongoing world insurgencies are now peoples Army's fight against President Aquino's government in Philippines; Karen Guerrilla's fight against Gen. Saw Maung of Burma, Guerrilla Warfare by the Khmer Rouge of Cambodia, El Salvador's Marxist Guerrillas, Sudan's Rebel 'Sudan Peoples Liberation Army' and the Mujaheddin of Afghanistan and the LTTE

and other ethnic splinter groups in Sri Lanka. Insurgency and counter insurgency operations claim thousands of victims year after year. The Irish terrorists killed Lord Louis Mountbatten, the last viceroy of India on 27 August 1979. In addition to national terrorism mankind is under the seige of global terrorism too. The spectre of terrorism is haunting the world over.

In the Indian subcontinent we do have our share of this phenomenon. As Mr. F.J. Khergamvala describes "Terrorism, whether in the form of bride burning over dowry or over the desert of Tripoli or Benghazi stems from some of the basest and some of the loftiest elements of human nature. Greed, avarice, hatred, revenge, territoriality, possessiveness, individual or group lust, religious motivation, clinically diagnosed disparity, a craving for human freedom, denial of justice as perceived by the perpetrator"¹².

Indian Armed Forces have also been destined to conduct counter-insurgency operations in its friendly neighbourhood. The ongoing "Operation 'PAWAN' in Sri Lanka and Operation 'Cactus' in Maldives are examples. These are two clear examples where the Armed Forces have been employed as political instruments whereby the standing of India in the international political arena has been raised to a great extent.

MATTER OF POLICY

Traditionally the Indian armed forces have remained insulated from too much civil contacts except where human life is involved. Indian political masters also do not approve of close interaction between the Armed Forces and the civil authorities. This stems from the fear of penetration of civil ethos and dilution of military discipline among the service people. Further some of the peace time deployments of the Armed Forces discussed in the above paragraphs may be well intentioned, innocent and sincere. However, they are liable to attain political colours. Therefore, it would be a matter of policy of the government in power, to deploy the Armed Forces in various nation building tasks during peace time.

MILITARY INTERVENTION

Having seen most of the legitimate deployments of the Armed Forces, the discussions would not be complete if we do not have a look at, atleast one of its not-so-legitimate employment.

In a developed and matured society the Armed Forces are considered as a symbol of National Unity and a source of National Stability. This confidence of the people originated from the organizational competence and professionalism displayed by the Armed Forces on various occasions. The

services and the service personnel are generally considered as models of discipline and efficiency. Therefore, during national crisis people look up to the Armed Forces to maintain national unity, security and normal public life. It is therefore generally accepted that military rule is the Child of political instability and breakdown of civil system. In certain countries like Korea and South Vietnam military rule was the outcome of war. In Pakistan, political instability and war with India made one 'Tweedlekhlan' to take over from another - as a well known British weekly described¹³. In African countries tribal rivalries and complete social economic and political chaos were the reasons for frequent military interventions.

A military rule would be a success if the Armed Forces are competent enough to provide a stable government which is not corrupt and selfish, but aim for national unity and pursue sound programmes for economic and social uplift by well managing the available resources. Once the things are settled and economic prosperity has set in the soldiers should withdraw to the barracks after establishing a stable civil government to run the country. Nigeria is an example where the military rule was a success and the military rule in Uganda by Idi Amin who had no economic perception and sound programmes and whose motive was to seize and maintain power at all costs, is an example of the utter failure of the military rule. A successful military ruler even if he had started on illegitimate means would attain legitimacy soon. Among the developing countries India is a unique example where the Armed Forces have shown no signs of political ambitions, have accepted the political supremacy as a characteristic of the national system, have remained apolitical and played a need based role while meeting the requirements of the country. In spite of the political, social and economic turbulences in the country, the Armed Forces remained aloof from politics. India as a firm democratic country enjoys special distinctions among the other developing countries of the world. India has a very competent civil administration service, a large literate middle class and relatively large intelligentsia. Well planned developmental programmes, industrial progress, scientific achievements and improved agricultural production have taken India very close to the developed countries. The military achievements have only improved the morale and confidence level of the soldier. There has been no serious power vacuum. Further an atmosphere necessary for a military take over as prescribed by Major General Antia (Retd.), which include political indoctrinisation of the Armed Forces, malfunctioning of the government in domestic and external affairs; unconstitutional behaviour of the executive, legislative and judicial organs of the government; wide spread dis-satisfaction among the armed forces are not prevalent in India¹⁴. The geography, vast area and multi-linguistic and multi-religious population of India also makes a proposition of military rule difficult.

Non-introduction of the appointment of the Chief of Defence Staff(CDS) in the Indian Armed Forces has been viewed by certain quarters as an indication of the fear of the Indian politicians of a possible military take over by the Indian Armed Forces.

Over the last 40 years after independence, the Indian Armed Forces have proved their loyalty, patriotism and devotion to duty beyond doubt and have remained apolitical and have shown no political aspirations. Therefore undue concern and apprehensions of a possible military take over could be put to rest at least for a few years to come.

CONCLUSION

In the above paragraphs an attempt has been made to establish the history and development of the present political military set up and possible legitimate deployments of the Indian Armed Forces.

Civil control and its unquestioned ascendancy over the Armed Forces has been well established as one of the main characteristics of our National Defence System. The National policy and the defence policy are not independent of each other. The Political Affairs Committee is the highest policy and decision making body and Chief of the Staff Committee at the lowest level is responsible for executing the decisions.

While the defence of the country's national frontiers remains its *raison d'être*, the Armed Forces could be deployed for counter insurgency, to provide aid to civil authorities, disaster relief, socio-economic developmental programmes and peace keeping missions in friendly neighbouring countries.

Indian Armed Forces have remained apolitical and subordinate to the civil government and have maintained correct and cordial civil-military relations.

Apart from being used as an instrument to attain the political will of the ruling government the Armed Forces also could be employed for national integration and nation building tasks during peace time which is likely to continue for some time to come as 'peace is already breaking out' all over the world as Victor Marie Hugo predicted in 'The Future of Man' more than a century ago, "In the twentieth century, war will be dead, the scaffold will be dead, hatred will be dead, frontier boundaries will be dead, dogmas will be dead, man will live. He will possess something higher than all these, a great country, the whole earth, and a great hope, the whole heaven."

NOTES

1. Lt. General Eric A Vas (Retd) "Pakistan's Security Futures" in "The Security of South Asia" - Edited by Stephen Philip Cohen.
2. Lt. General S.K. Sinha PVSM
"Higher Defence Organisation in India".
3. Lt. General S.K. Sinha PVSM
"Statesmen and Soldiers"
4. Air Vice Marshal John Downey RAF in "Management in the Armed Forces".
5. Air Marshal R.D. Sahni (Retd)
"If China Attacks again" in the Defence Review Annual 88.
6. Address by Mr. C. Subramaniam; Defence Minister of India on "India's Defence Strategy in the Next Decade" to the National Defence College New Delhi on 29 October 1979.
7. Lt. General S.K. Sinha in "Indian Army Since Independence".
8. Mr. K. Subramaniam in "Prospects for Stability and Security in South Asia"
9. "India speaks at the U.N." - Ministry of Information and Broadcasting Government of India publication.
10. Ibid
11. Jerrold F. Elkin and W. Andrew Ritezel "Military Role Expansion in India" - "Armed Forces and Society". 1985 Summer issue.
12. F.J. Khargamvala in 'Global Terrorism' - Front Line Feb 04-17. 1989.
13. G.S. Bhargava in preface to "Pakistan in Crisis".
14. Maj. Gen. S.N. Antia (Retd) "Military Coup possible in India".

A Riposte to "Navy's Blue Water Obsession"

"SAGE"*

The fulminations of an old diehard sapper officer against the perceived role of the Navy was read with a certain degree of amusement by the naval community. One has known all along that the true bugbear of this paper tiger has been the Aircraft Carrier, but this time around he takes on the "Blue Water Navy" also as his b'ete noire. He further confuses the issue, as 'Pongo's not conversant with sea-power are wont to do, by implying that a 'Blue Water Navy' is somehow synonymous with Aircraft Carrier i.e. if the latter was not there, so will the former. And then Fortress India, well defended by his huge parent service, and marginally supported by a smaller Air Force and a coastal navy shall march into the 21st century as the edifice of a strong regional power. To say the least, these are the exertions of an enormously complicated mind, to which age has neither added statesmanship nor perspective of world history. If one has to analyse the issues raised by the author of "Navy's Blue Water Obsession"*** then these need to be listed in an analytical manner, so that each of his confused claims can be independently answered. Any student of military history would have obviously noticed that Brig (Retd) Grant isn't particularly strong on his facts. Those who wish to create history, ignore history created by others. He speaks of last real battle at Sea Off Okinawa as if nothing else happened at sea before that. His favourite naval experts are Ashley J Tellis and Admiral Rickover. The former has never been to sea in a ship and latter is the high priest of nuclear submarine. Mahan, Gorshkov, Pannikar and Toynbee won't do for Brig Grant, our self-proclaimed naval analyst, because they talk of influence of sea-power on world history. Nehru's "to be secure on land, we must be supreme at sea" also won't do. And as for development of politico-economic history of the world, he has no suggestions whatever. Is it surprising therefore that he should seek an answer for a farcical suggestion ; who the perceived enemy of the Navy is ?

The issues raised by Brig Grant can be listed as follows :

- (a) There are no enemies, perceived or otherwise against whom we should seek to build a carrier task force.
- (b) India is wedded to the policy of a defensive role and has no

*The author is a senior naval officer.

**Article by Brig N B Grant, published in the USI Journal July-September 1989.

intention of projecting its power beyond its shores except for bush-fires in nearby places like Maldives and Sri Lanka.

(c) Huge sums of money are being wasted on Carrier task forces which though synonymous with Blue Water fleets, are created for their own sake to please a few senior naval aviators.

(d) Defence Ministry has no proper system of analysing and allocating its meagre resources to the three services.

ROLE OF THE NAVY

Taking the first issue, it would be foolhardy to expect a land-lubber, to properly assess the influence of sea on the security environment and economic perceptions of a country like India. Naturally therefore he short-circuits his historical curiosity by seeking a few apt quotations from foreign experts, preferably from the West, as the last word. He dutifully ignores the main historical fact that India was never fully conquered until by those, who came by the sea. Many who crossed her land frontiers were either defeated and pushed back or assimilated in the all embracing cultural environment of the country. But those who used the flexibility of sea power could neither be defeated nor fully assimilated. Any layman who has read Indian history or listened attentively to our successive Prime Ministers since independence, would have imbibed this fact adequately.

Much has happened in the last 40 years at sea, even though our military historian has not learnt about it. United Nations Convention on the Laws of the Seas of which India is a signatory, apart from being a leading light, has divided the oceans of the world in such a manner that we ourselves have acquired an area equal to two-thirds of our land area, for economic development. Today more than 45% of our oil comes from these sea areas and prospecting for more hydro-carbon deposits is going on in areas even further away from our coast. Much of the remainder 55% of our oil still comes from abroad. This amounts to about 30 MTs a year or around 146 MTs for the 8th Plan, as planned by our planners. In terms of tanker loads, it means 2 tanker loads daily this year, building up to 3 tanker loads a day in 1995. This also means at least six tankers are inward bound and six outward bound somewhere in the Indian Ocean. To protect their unarmed tanker traffic the extra-regional nations - USA, USSR, UK, France and Germany kept over a 100 warships in our ocean spaces during the Iran-Iraq war. Even today to protect the very same SLOCS (sea lines of communication) there are over 50 warships and 25 support ships belonging to extra-regional navies, deployed on a daily basis in the Indian Ocean. But Brig Grant wants us to answer, who is the enemy ?

Similarly, last year we earned over Rs 600 crores of precious foreign exchange by export of marine products caught in our EEZ. The growth rate in marine product export is around 20% per year. Our antagonist of Blue Water Navy ought to know that whilst India's foreign commerce amounted to only Rs 5,000 crores in the fifties, it is well over Rs 56,000 crores this year and expected to rise to over Rs 300,000 crores in the year 2000. If this country does not import oil or earn foreign exchange through world markets, where will it get the money to support even the service he fervently promotes. Understandably it is the colour of olive green.

But who is the enemy, he might yet ask ? Does he know that even to protect the transportation of goods within the country, our Railways employ, train and deploy over 100,000 constables of the Railway Protection Force. Does he truly believe that in this vast, wicked world no constables are required at sea ? The simplistic answer to a dumb question would be that a country may not have branded enemies to threaten him all the time, yet he may have vital national interests that need protection all the time. Would he like to suggest that since we have not had a good fight with China for the last 27 years, time has come to disband one-third of our huge million men army, which after all, is also enormously expensive and a big drain on the exchequer. No, he would say ; you never know when our parleys with China turn sour and army is needed all over again, so that we are not humiliated a'la 1962 again. In other words, are we guilty of perpetuating a threat, or does it exist all the time in real terms. What we are protecting with our large army, is the national self-interest, the ability to counter an adversary, should China become one in the future. Pray, why a similar philosophy not be followed by a large, proud and self-reliant country at sea. The naval planners fervently believe that this country needs two strong, balanced blue water fleets to protect our EEZ, our commerce, our fish, our oil deposits and last but not the least our far-flung island territories. The last one is even more important because it is the only part of India which was physically occupied by Japanese in the World War II for over 3 years. Need one recall that troops belonging to our erstwhile British masters ran from there, with tail between their legs without even firing a single shot against the invading Japanese Navy. There are still many people in A&N islands, who vividly remember the ignominious retreat by our troops.

INDIA WEDDED TO DEFENSIVE POLICY

The next important issue raised by Brig Grant is that as a country we are wedded to a defensive policy, so what business do we have to be seen at sea that surrounds us. Fortress India is all that we should seek, protected by a large army and supported by air power where needed and

a coastal Navy to ward off outside intruders should they wish to invade our privacy by sea. Furthermore, he makes the point that sea denial à la Rickover was the philosophy that our Navy followed until some senior naval aviators reached commanding heights in the Navy to change it all to sea control with their Blue Water fleets, Carrier task forces et al. Since he has not read much of naval history, as shall be explained later it is doubtful that he understands the difference between the two doctrines i.e. sea-denial versus sea control. Let us go back in time to the first few weeks after independence, when the very first planning paper on the Navy was written by our naval planners - no naval aviators were found then or even many years later. The proposal put before our first Prime Minister, Jawahar Lal Nehru, was that independent India, free of the shackles of the then Far-Eastern Fleet of the Royal Navy based at Trincomalee, needed 2 Light Fleet Carriers (to be given up when 2 replacement Fleet Carriers are acquired), 4 Cruisers, 16 Fleet Destroyers, 16 Submarines, 8 Frigates, 6 Minesweepers and other Auxiliary/Coastal forces to defend the Maritime interests of independent India. If the cost was seen to be prohibitive, then they reminded the Govt that hitherto the maritime defence of India was one of the primary tasks of the British Far-Eastern Fleet and they were actually paid from the Consolidated Fund of India for performing these duties. So, what they were seeking was incremental diversion of funds already committed for the maritime defence of the country. Whilst the naval plans were debated over for many years, the fratricidal war over Kashmir with Pakistan had ended and the era of Hindi-Chini Bhai Bhai given a decent burial by the Chinese coup d'état in 1962. Both the Army and the Air Force gained hugely in force levels after the debacle in the North East. However, it must be said to the enormous good sense of our political masters that by 1964 a definitive plan for development of Naval Force Levels was also approved by the Cabinet and it included 2 Aircraft Carriers amongst a host of other types of ships. The first aircraft carrier VIKRANT had already arrived in 1961 and the second was to follow as and when financial situation permitted. So whilst India remained wedded to a defensive policy, no more will its national interests be interfered with by outsiders, be it on land or sea.

Whilst it is a matter of fact that a person mesmerized by sub-continental threats cannot be easily persuaded to visualise threats to our economic assets, an attempt will be made to do so. Traditional hardcore military analysts only see warfare in terms of loss or gain of territory. The Great Wall of China, the Siegfried Line and the Maginot Line were designed to protect territory first and everything else afterwards. Hitler was given many a fancy plans to capture England by cross-channel invasion force or bomb it out of existence by air. But what very nearly succeeded was the battle at sea. In the year 1940 and 1941 German submarines were sinking

almost half a million ton of merchant shipping a month at sea amounting to nearly 6 million tons a year. This is almost exactly the figure "6,000,000 MTs" of shipping that India has taken 40 years to build. Their loss may not look like or feel like the loss of territory, but it very nearly brought Britain to its knees. And what saved these merchantmen at sea ; the ASDIC on a warship no doubt, but equally so the air power at sea. The aircraft flown from land bases or aircraft carriers deep in the Atlantic, Broke up the wolf-pack tactics being practiced by German submarines. The sea-denial was at last being overcome by sea control. The lone Escort Aircraft Carrier with convoys was at last making it possible for much larger proportion of merchantmen to get through. Shipping losses reduced dramatically, and submarine losses increased correspondingly. Post-war statistics proved that whilst 350 submarines were sunk by surface ships, an equal number was sunk by air power at sea.

And how does a similar situation prevail in our context ? Some politico-economic expert has to explain it better in a more lucid form than can this country's economy be developed or even sustained without world-wide commerce. Why do we read everyday that we must export more to earn FFE not only to develop but even to pay back the enormous loans that we have already taken. Can this country of 800 million people wind up with its armed forces protecting only its territorial interests and be totally unmindful of its economic interests. Is Fortress India all that we need to defend ? Should the obsession with Chinese and Pakistani threats to our territory become the only cardinal principle of our defence preparedness, to the entire exclusion of economic factors ? Have we become so self-sufficient that developmental activities for 800 million can be achieved without resource to foreign trade or assistance ?

Brig Grant has himself conceded that the sea denial capability of submarines has increased tremendously. Indeed, he is correct for once - our immediate adversary with submarine launched Harpoons has achieved a level of potency unimaginable till yesterday. To counter this, we need, not more sea-denial capability but sea control capability. ASW (Anti Submarine Warfare) has and must become the byword of our defensive posture at sea. And what he cannot be accused of not knowing, is that ASW at sea has become air-borne. The most effective ASW against a missile fitted submarine is from the air ; instant, organic air platform. The ASW equipment on ordinary surface ships is vital, but alas, mostly as a complement to the air effort, which must go in first. Hunter-killer operations of yesteryear can safely be done only by airborne platforms or we may end up with many more KHUKRI episodes in the future ; particularly in the very poor hydrological conditions that prevail in our waters.

Let us look at another defensive posture at sea. We have all heard of the deadly accurate sea-skimming missile, a la Exocet. Brig Grant has himself used this potent weapon's capability to sound the death knell of not only aircraft carriers but also all surface warships. If that be so for Exocet (40 km missile) then presumably the same goes for much improved Harpoon (100 km missile). Once again our immediate adversary has acquired these weapons in air launched version, the former on Atlantics and Seakings and the latter on P-3C Orion aircraft. These are by no chance defensive weapons and nor have they been acquired for maritime museums. They will be used and with latest addition of aircraft, they can be fired anywhere in the North Arabian Sea and beyond. Should we therefore prepare for some sort of defensive apparatus against this threat or exercise the other obvious choice-clear the North Arabian Sea. And what do we do with scores of expensive fixed oil/production platforms which supply the vital oil for 45% of our needs. What about disruption in our foreign trade, fishing fleets and last but not the least self-esteem. Is there a specific difference between territorial self-esteem and a maritime self-esteem ?

The Navy has after considerable analysis decided on organic air power to remove the Orion or Atlantic aircraft, armed with Air to Surface guided missile, before they fire the missile. What we need is an organic fighter aircraft instantly available to defend ships against such threats and not confine ourselves to coastal belt with shore based fighter air cover, the response time for which has never been recorded less than 2 hrs even in stage-managed exercises. Brig Grant is wrong when he says that naval doctrine or postures have never been discussed by the Ministry of Defence in clear terms. May be there has not been the time to discuss it with him. But concerned agencies of the Government are well aware of the Naval perceptions in the matter. Had it not been so would we have ended up with two aircraft carriers in 1988, planned as far back as 1947.

AIRCRAFT CARRIERS ARE EXPENSIVE AND ACQUIRED TO PLEASE FEW SENIOR NAVAL AVIATORS

Whilst the chair-borne military analyst has every right to his personal opinions, it is also true that his facts are grossly out of shape. He is right in the sense that the world aircraft carriers league has eight members today, five more than the three members in World War II, when only UK, USA and Japan were its active members. So what does it prove, cost notwithstanding, more nations are willing to invest their money in a weapon system that still continues to provide the flexibility and lethality of air power at sea, as Air Forces provide over land. I hope it is not his theme that air power has outlived its usefulness over land as well as sea. It would be difficult to outline the full spectrum of air power at sea in this article. But,

it is no secret that Japan and China are already designing their future aircraft carriers. As for Canada, Australia, Germany and Netherlands their defensive compulsions are more guided by their small populations, relative prosperity and treaty arrangements with allies possessing carriers.

As regards his Goebbelisian price tag of Rs 18,000 crores for a carrier task force, the less said the better. He obviously has picked this price tag from his favourite naval analyst, Mr. Ashley J Tellis, a fellow of Chicago University's political science department. Had he done his own research in a good Indian Library, he might have discovered that our nation from the beginning of time i.e., independent India, has spent Rs 11,000 crores on the Navy's total infrastructure which includes ships, submarines, aircraft, dockyards, training schools, personnel and storage depots amongst host of other establishments. All he has to do is to find out the naval budgets from 1947-89, usually discussed in every newspaper in early March and he will get the figure mentioned above. Of course, our carrier task forces are not as manpower intensive as Mr Tellis is used to, nor do they carry Soda-pop machines. Speaking still in financial terms, our chair-borne analyst might discover certain other revealing facts - that the Indian Navy has only used 10.8% of all that this great country has spent on its Armed Forces since 1947 - that no other country with a self respecting Navy spends less than 30% of its defence budget on its Navy. This is a malaise only peculiar to India, where sub-continental emotions have so perpetuated the threat scenario that we have ceased to see wood from the trees. So what purpose will a public debate achieve, if we continue to feel insecure along our land frontiers, even after 90% of all money spent on defending this country is found to be inadequate to protect them.

Next, let us revert to the so called vulnerability of the Aircraft Carrier. Brig Grant states in a grandiose manner that the last important battle by aircraft carriers was fought at Okinawa where four of them were lost. Did he know that over 6 million tons of shipping was lost at sea in 1941 alone. Does he know that after Pearl Harbour it was the Carrier Task Forces which fought pitched battles in the Pacific, from General Doolittle's aircraft flown from carriers bombing Tokyo in April 1942, to Coral Sea, to Midway, to Guada-canal, to Tarawa, to Solomon Islands, to Gilbert, Marshall and Mariannas Islands, to Leyte Gulf, to Philippines and then on to Ryukyu Islands in June 1945 where Okinawa is. It might please him, that in all these battles, many more than four carriers were sunk on either side, but almost always by another carrier's aircraft. In most of these battles between 200 to 400 aircraft took part in each of the clashes and almost invariably out of sight of each other's task forces. Naval air-power was never so deadly, never so effective as in these mighty engagements and it was the aircraft carrier which turned the tables against the well entrenched Japanese fortresses

on each of the islands mentioned above. Public debate is only possible if facts are properly gathered. And then there were also carrier engagements in the west, which can become the subject matter of another article.

Brig Grant speaks of the grand delusions of the Navy having three blue-water fleets, as if he is privy to inside information on it or may be he is only re-emphasising what Right Honourable Vicount Hall, the First Lord of Admiralty wrote to Mr. Patrick Gordon Walker, the Secretary of State for Commonwealth Relations on Nov 20, 1950. Quote "The fact is as I think we all realise, that there is fundamental divergence of views between the Indians and ourselves on what the function of the Indian Navy should be. We naturally wish to see them build up a Navy which, while providing adequately for home defence needs, would also in future be able to make a significant contribution to Commonwealth naval strategy, on assumption that India would be willing to cooperate. Hence the importance we have all attached to the provision in the Indian Navy of adequate anti-submarine and minesweeping forces. The Indians on the other hand have been pressing for help in building up what they described as a fully balanced force, including a substantial naval aviation element" unquote. This was the time when British global naval policy was structured around a British blue-water navy supported by brown-water navies of its dominions.

The British had no compunctions about preventing a third world developing country like India from looking after its full range of maritime responsibilities by herself. It was in continuation of this policy that they totally torpedoed our submarine acquisition programme. Our sea-based naval aviation plans got through by the skin of their teeth only because of the mutual friendship and regard that existed between our then Prime Minister and Admiral of the Fleet Lord Louis Mountbatten.

Having sailed through many an uncharted and dangerous water, it is strange that our naval plans should remain under constant criticism from self-appointed military analysts who know so little about sea power and its long term effects on world history. If we have to continue as a market economy with world wide trading interests, then there is no way we can shy away from our sea control and sea denial forces. The aircraft carrier is a multi-role sea control ship. It not only provides air defence for the fleet wherever it goes but has also become a vital link for anti-submarine warfare against submarines fitted with tube-launched sea skimming missiles. It needs close in defence against torpedoes fired from a closing submarine from other units of the fleet ; but equally provides adequate ASW helicopters for protection of the fleet against distant missile launching submarines. Airborne Hunter-killer operations against submarines can only be carried out in a sustained manner by its ASW choppers. Frigates and destroyers

with one helicopter each will be hard put to cope with this task, which by its very nature has become quite complex.

MINISTRY OF DEFENCE HAS NO PROPER SYSTEM FOR ANALYSIS AND ALLOCATION OF FUNDS

It is not clear how Brig Grant has come to this monumental conclusion. Nothing can be farther from the truth. Naval plans as a whole and aircraft carrier programme in particular has seen over 30 years, sustained scrutiny by MOD and a host of operational analysis agencies from the DRDO. It is a fact that no other weapon system has undergone so detailed an examination as carrier acquisition programme. With Air Force planners also fighting all the way, it is an amazing achievement that Indian Navy managed two aircraft carriers after nearly 40 years of agonizing pen pushing, briefings, presentations and analyses running into hundreds of thousands of pages. The main redeeming feature of this prolonged battle was that more leaders of surface navy fought this battle than naval aviators, who were in the early days outnumbered 10 to 1. That is why Brig Grant is short on his facts. He voices opinions, not realities.

It must be said to the credit of the civil servant that he acknowledges the proposition that he is no professional. But years of administrative experience prepares him adequately to sift chaff from the wheat. The success of the Aircraft Carrier programme lies therein. Only after reams of paper had been written, analysis carried out, conflicting opinions of services taken into account, did he recommend clearance of this project by the political hierarchy. Occasionally it may be the political boss who dictates the way, but rarely in opposition to civil servant's advice.

It is by sheer coincidence that one came across another article by Mr. Ashley J. Tellis, the high priest of anti-aircraft carrier forum in India. Suddenly, he sees sense in India's air power at sea but yet gives Pakistan full marks for dramatically altering the Indo-Pakistani balance of capabilities at sea. He believes in the efficacy of American weapons supplied to Pakistani Navy vis-a-vis what we have in our inventory. He knows what Orions and Atlantics can do to our surface ships but brushes off what we could do them when in the vicinity of our carrier task force. He is antipathetic to our attack and patrol submarines but allows Pakistani submarines greater credibility because they will get through anyway. More of this structured analysis and we shall have to retreat back into Fortress India lock, stock and barrel. This riposte is for Brig Grant and not Mr. Tellis.

Finally, Fortress India is a nice concept and has been the main theme of all continental thinkers hitherto. But the economic growth of this country

has gone on an entirely different way - it's broken the medieval shackles and wants to compete with the world. If that be so, then we have to look outwards and three-fourths of our windows look out towards the sea any way.

CONCLUSION

There is no gain-saying that the aircraft carrier programme is an expensive one, but not of such fantastic dimensions as made out by Brig Grant. A figure on what our nation has spent on the Indian Navy as a whole since 1947 has been given. If he disagrees, it would be interesting to see the figure he produces by his own home work as suggested and not necessarily rely on Mr. Ashley Tellis' arithmetic.

Next, ours is a market economy and we are dependent upon world-wide commerce, offshore and imported oil and a host of other raw materials and engineering goods, 95% of which travel by the sea. Can we do without them ? Can we afford disruption in their flow, however brief ? Can we completely change over to an inward looking economy without contact with outside world and yet feed and provide jobs for 800 million people ? These are issues that need serious analysis and may become a subject matter of further debate. But if Indian ships, carrying Indian wage goods are moving over the sea, then they have as much right to protection as any territory of India. It is no use craning our necks inward, as it is no longer possible to turn our economy around. And if we have to go down to sea in ships, then trust a professional, give him the tools he needs to defend it.

Finally, Brig Grant, a Fortress India alone won't do. It makes little economic sense to build an economy primarily dependent on world trade and say that we won't or cannot provide for its defence. The advanced weapon systems that you advocate are already in our inventory and form part of our blue water presence at sea. They by themselves would be inadequate unless supported by organic air power and that is where the aircraft carrier helps out. Navy has no Blue Water Obsession - this job was done by a foreign fleet before Independence. Who do we go to now? Does he have any suggestions or shall we ask Mr. Tellis who already claims that "India is all at sea" with Pakistan's new naval might.

On Generalship : An Historical Perspective

MAJOR HAROLD E RAUGH, JR., UNITED STATES ARMY

No one man can win a battle by himself, but throughout history battles have been won and lost because of the strengths or weaknesses of one individual—the leader. Indeed, it was Napoleon who astutely observed that “An army is nothing without a head.”¹

A number of leadership characteristics and attributes have been identified as being essential for the higher commander—the general—to possess. Generalship is undoubtedly one of the most difficult and complex arts to master, dealing “not with dead matter but with living beings, who are subject to every impression of the moment, such as fear, precipitation, exhaustion—in short, to every human passion and excitement.”² Simultaneously, the general must control a multitude of intangible factors, to include time and weather, while at the same time being confronted by an armed and hostile adversary intent on his total destruction. The mantle of responsibility borne by a general is enormous, and has evolved through the centuries, in conjunction with numerous technological and societal advances, into an even greater challenge more difficult to master.

Of course, there is no set equation or magic formula or textbook definition of generalship, no recipe of essential ingredients for the successful general. Perceptions and definitions of the qualifications of generalship have evolved only slightly through the centuries, the human elements of leadership remaining relatively constant. And human beings are, naturally, not perfect. Indeed,

A perfect general, like Plato's republic, is a figment. Either would be admirable, but it is not characteristic of human nature to produce beings exempt from human weaknesses and defects. The finest medallions have a reverse side. But in spite of this awareness of our imperfections it is not less necessary to consider all the different talents that are needed by an accomplished general. These are the models that one attempts to imitate and which one would not try to emulate if they were not presented to us.³

In the following paragraphs, selected theories developed through the centuries of “all the different talents needed by an accomplished general” will be highlighted and reviewed.

Sun Tzu was one of the earliest military philosophers and writers, and his unsurpassed essays on *The Art of War* were probably composed during the fourth century, B.C. He lived during a period of considerable internecine warfare in China, at a time when armies were no longer commanded by hereditary rulers of their families but by professional generals. Sun Tzu keenly observed that the essential "five . . . virtues of the general (are) wisdom, sincerity, humanity, courage, and strictness . . . Hence the army refers to him as 'The Respected One.'"⁴

There are, according to Sun Tzu, five "matters" - "organization, control, assignment of appropriate ranks to officers, regulations of supply routes, and the provision of principal items used by the army"⁵ that the general must master in order to win: "those who do not are defeated." Sun Tzu sagaciously added that "it is the business of a general to be serene and inscrutable, impartial, and self-controlled."⁶ Conversely, Sun Tzu recognized that there are five qualities which are "dangerous" in the character of a general : those of being reckless, cowardly, quick-tempered, having "too delicate a sense of humour" and having a compassionate nature, the last item pertaining to a general who is overly-concerned with friendly casualties and may be reluctant to order his men into combat. The inevitable results of these shortcomings are, according to Sun Tzu, "the ruin of the army and the death of the general."⁷

Maurice, Comte de Saxe (1696-1750), the famous French Marshal, wrote *Mes Reveries* more than two millenia after Sun Tzu completed his brilliant study. Saxe's book was very important in the evolution of warfare, clearly showing a connection between old and new ideas of warfare and recommending many tactical innovations. He recommended the use of light infantry, as well as giving the soldiers the order to fire at will as a target presented itself, rather than in volley on command.⁸

Saxe was a highly-experienced and competent general in his own right, having participated in most of the European campaigns of the first half of the eighteenth century. He served in the Russian and French armies, and was the victor at the battle of Fontenoy in 1745 against the British and their allies. Saxe included a section on generalship in his book, introducing the topic in a very succinct manner : "The first of all qualities (required of a general) is COURAGE. Without this the others are of little value, since they cannot be used. The second is INTELLIGENCE, which must be strong and fertile in expedients. The third is HEALTH."⁹ The following attributes, according to Saxe, should also be possessed by the general:

- a talent for sudden and appropriate improvisation ;

- the ability to penetrate the minds of men, while remaining impenetrable himself ;
- the capacity for being prepared for everything ;
- activity accompanied by judgement ;
- skill to make a proper decision on all occasions ;
- exactness of discernment.

Especially noteworthy in Saxe's thesis is that "when (the general) sees an occasion, he should unleash his energies, hasten to the initial point at top speed, seize the first troops available, advance them rapidly, and lead them in person." This "Sixth sense" is of the greatest importance "The important thing is to see the opportunity and to know how to use it" - and has been termed *coup d'oeil*.

Frederick the Great was probably the best qualified person to comment upon the art of war in the eighteenth century. In 1740, when he was twenty-eight years o'd, Frederick succeeded his father as King of Prussia. He made his reputation as a field commander in numerous campaigns during the two Silesian wars (1740-1742 and 1744-1745), the Seven Years' War (1756-1763), and the War of Bavarian succession of 1778. Many of Frederick's battles were characterized by the exploitation of the superior mobility, discipline, and firepower of his army "by throwing the weight of his force against a portion - usually a wing - of the enemy line of battle.¹⁰ What was indispensable to Frederick's success was the rapid deployment of his forces from march order to a line of battle using his famous "oblique order."

Frederick was an untiring military theorist and writer, wanting to assimilate and disseminate the lessons he learned from his own experiences of warfare as well as from his study of military history. One of his earliest, and most important, works was *The Instruction of Frederick the Great for his Generals*, published in 1747. This tome of military maxims and tactical instructions contains a chapter entitled "Talents of a General". Frederick believed the general should be able to "hide his thoughts", so that others would not know what he was contemplating and planning. The personal conduct of the general should be "well reasoned," and the general's composure and self-control must be maintained at all times. Respect for the enemy is important, but the reputation or capabilities of the adversary should not be inflated so that one's own troops lose confidence in their own abilities. It is imperative, according to Frederick, to preserve secrecy whenever required, and the general should refrain from routinizing his actions by "changing (his) methods often and to imagine new stratagems."¹¹

In an era of harsh discipline, Frederick thought the general should practice "kindness and severity" being tough but fair and be concerned about the morale and welfare of his men, as well as praising subordinates. He recommended the general conduct personal terrain reconnaissances, and be "vigilant and indefatigable". Frederick's general should be prudent, and keep the enemy occupied and on the defensive. Frederick was ahead of his time by showing great concern for his soldiers, and believed that "when you seem to be most prodigal of the soldier's blood, you spare it, however, by supporting your attacks well and by pushing them with the greatest vigor to prevent time from augmenting your losses."¹²

Carl von Clausewitz has become known as "the spiritual father of the German army."¹³ Born in 1780, Clausewitz was primarily a staff officer, and the majority of his career was spent involved in the campaigns of the Napoleonic wars. His mentor was Scharnhorst, with whom he first became associated in 1801, and later became a close friend of Gneisenau. After the Prussian king Frederick William III concluded a separate peace with France in 1812, the disenchanted Clausewitz joined the Russian Army, but returned to Prussian service a few years later. He held a number of administrative and staff positions until his death from cholera in 1831.

Clausewitz realized the Napoleonic campaigns had revolutionized warfare, and his post-war duties permitted him a great deal of time to reflect upon warfare and to write down his philosophies. His *magnus opus*, *On War*, was published by his wife in 1832. Clausewitz's "concepts of genius, friction, (and) chance in their manifold interaction," for the first time made it possible "for the theorist to subject vast areas of military reality to logical, systematic analysis."¹⁴

In the chapter "The Genius of War," Clausewitz states "Every special calling in life, if it is to be followed with success, requires peculiar qualifications of understanding and soul."¹⁵ Clausewitz's requirements for "the essence of military genius" are equally applicable to generalship, and his essay is one of the most interesting, enlightening, and lucidly-written expositions on the topic.

Clausewitz states, "war is the province of danger and therefore courage above all things is the first quality of a warrior," and delineates two kinds of courage : "first, physical courage, or courage in presence of danger to the person; and next, moral courage, or courage before responsibility, whether it be before the judgement-seat of external authority, or of the inner power, the conscience."¹⁶ War also requires "a certain strength of body and mind," as well as "a fine and penetrating mind," which must always be open to

new thoughts and ideas and prepared for any contingency. Resolution and intelligence are required of the general, as is *coup d'oeil*, an intellect "which, even in the midst of this intense obscurity (of war), is not without some traces of inner light, which lead to the truth, and then the courage to follow this faint light" the "mental eye."¹⁷ A kindred quality is presence of mind, and also essential for the general are energy, firmness, staunchness, strength of mind, and character.

An attribute, according to Clausewitz, which "perhaps may be looked upon as the most marked if it is not most important," is the "sense of locality"; "the power of quickly forming a correct geometrical idea of any portion of country, and consequently of being able to find one's place in it exactly at any time."¹⁸ Related to this is an appreciation for and ability to use the terrain to one's advantage. "Higher powers of mind" are also essential, coupled with a sense of unity, judgement, temperament, and character. Clausewitz's thought-provoking analysis of the attributes required of the Higher Commander sheds great light on philosophies and experiences derived from the Napoleonic campaigns.

In February 1939 a relatively obscure British Army officer, Lieutenant-General A.P. Wavell, delivered the three Lees knowles lectures at Trinity College, Cambridge. These lectures attracted no notice at the time, and only about twenty or thirty undergraduates-all members of the school's officer Training Corps-attended each lecture.¹⁹ Less than two years later, Wavell's name was a household word, and he was considered "Britain's Soldier of the Hour" after the masterful stroke of generalship in which the numerically-superior Italians in North Africa were soundly defeated by his forces. At this time, his Lees Knowles lectures were published as *Generals and Generalship*, undoubtedly the finest exposition of this topic written this century.

The first lecture was entitled "The Good General", containing "some general observations on generals and generalship," in which "the essential qualifications of a higher commander" are posited. Wavell believed "the first essential of a general (to be) the quality of robustness, the ability to stand the shocks of war,"²⁰ followed by the associated attributes of courage (both physical and moral), health, and youth. Character is also an essential characteristic: the general must know "what he wants and has the courage and determination to get it." Wavell also thought "boldness" - a spirit of adventure in one willing to take a chance- was a "mark of a really great commander as distinguished from the ordinary general"²¹ Mentally, the general needs to possess common sense and a knowledge of military matters, especially the related administrative and logistical factors. The general has

to be tactically and technically proficient, open-minded, flexible, possess a knowledge of and concern for humanity and men, and be decisive and imaginative.

The second of Wavell's lectures was "The General and His Troops". In this lecture Wavell addressed the role of the general in relation to his troops. The human element, in which the general is in personal contact with and visible to his soldiers, is of the utmost importance, and "tradition and discipline are the real root of the matter,"²² with the general's business being "to see justice done." Concern for the health, welfare, and morale of the soldiers is essential, and the general should always try to instill confidence in his men-though never at the expense of courting popularity. The general should give praise, "ungrudgingly," where and when it is due, be honest with his soldiers, and avoid sarcasm.

Wavell's third lecture was entitled "The Soldier and the Statesman," and does not contain information relevant to this essay.

Wavell knew his topic well; not only had he served under commanders such as Allenby and Chetwode in World War I, but Wavell himself later served as the first Supreme Commander in World War II, was promoted to Field-Marshal, and served as Viceroy and Governor-General of India.

Generalship is undoubtedly one of the most difficult arts to master. Perceptions and definitions of generalship have changed throughout the centuries, but a number of base characteristics have remained constant. The general possessing as many as possible of the delineated attributes and qualities-physical, moral, and mental- deemed to be essential by knowledgeable military practitioners and theoreticians, will be successful.

Wavell keenly observed that "A general may succeed for some time in persuading his superiors that he is a good commander : he will never persuade his army that he is a good commander unless he has the real qualities of one."²³ This is the most stringent of requirements. Soldiers will be able to differentiate between the truly good general, or leader, and the general who merely possesses a facade, or wears a mask, of concerned and effective leadership - and the soldiers will follow the "real" general to battlefield victory.

NOTES

1. Napoleon, as quoted by Colonel J.F.C. Fuller, D.S.O., in *The Foundations of the Science of War* (London : Hutchinson, 1926), 125.

2. A. Von Boguslawski, as quoted by Major-General J.F.C. Fuller, in *Generalship, Its Diseases and Their Cure* (Harrisburg, Pennsylvania : Military Service Publishing Co., 1936), 5.
3. Frederick the Great, *Instructions for His Generals*, trans. Brigadier General Thomas R. Phillips (1944 ; rpt. Harrisburg, Pennsylvania : Stackpole, 1960), 53.
4. Sun Tzu, *The Art of War*, trans. Samuel B. Griffith (New York : Oxford University Press, 1963), 65.
5. Ibid.
6. Ibid., 118.
7. Ibid., 115.
8. John Laffin, *Links of Leadership* (1966 ; rpt. London : Ableard - Schuman, 1970), 168.
9. Maurice de Saxe, as quoted by Adrian Liddell Hart, ed., in *The Sword and the Pen* (New York : Thomas Y. Crowell, 1976), 90. The following Saxe quotes are from ibid., 90; 91.
10. Jay Luvaas, ed. and trans. *Frederick the Great on the Art of War* (New York : Free Press, 1966), 13.
11. Frederick the Great, 55.
12. Ibid., 57.
13. Carl von Clausewitz, *Principles of War*, trans. and ed. Hans W. Gatzke (1942 ; rpt. Harrisburg, Pennsylvania : Stackpole, 1960), 1.
14. Peter Paret, "The Genesis of *On War*," in Carl von Clausewitz, *On War*, ed. and trans. Michael Howard and Peter Paret (1976 ; rpt. Princeton, New Jersey: Princeton University Press, 1984), 18.
15. Carl von Clausewitz, *On War*, ed. Anatol Rapaport (1908 ; rpt. New York: Penguin, 1968), 138.
16. Ibid., 139
17. Ibid., 141.
18. Ibid., 153.
19. John Connell (John Henry Robertson), *Wavell: Scholar and Soldier* (London: Collins, 1964), 203.
20. General Sir Archibald Wavell, *Generals and Generalship* (London : Times, 1941), 2.
21. Ibid., 7.
22. Ibid., 13.
23. Ibid., 19.

The Role of Indian Army

MAJ GEN (DR) KL KOCHAR PVSM (RETD)

The role of Indian Army has not been legalized: it has no constitutional bearing. The constitutional law does dwell on the powers of the President (Commander-in-Chief of the armed forces) but is singularly silent on the role of the Military. Resultantly, each of the three services is operating on a contrived or inherited role.

Army's role has a history. "In March 1921, the Legislative Assembly of India passed a Resolution defining the role of the Army in India as the Defence of India against external aggression and maintenance of internal peace and tranquility". This role was changed subsequently because of the inability of the Army in India to execute it due to paucity of resources. This caused the formation of the Garran Tribunal in 1933 which deliberated over the Role. Eventually, the following role emerged.

"The duties of the Army in India (Role of the Army) include the preservation of internal security in India, covering the lines of internal communication and the protection of India against external attack".

The previous Chief of Army Staff, General K. Sundarji, in an interview to *Sunday*, a (weekly) 2 to 8 February 1986 issue, spelt out the roles:

- a) Primary: "Prevent our adversaries from attacking us and to maintain the territorial integrity of our country".
- b) Secondary: "To go to the assistance of Civil authorities in the event of law and order situation going beyond their control".

RAMIFICATIONS OF THE ROLE

Primary Role. The first portion of the Role - "prevent our adversaries from attacking us" has an inherent but all the same a vital question: how would that be executed? By posing a credible deterrent comprising mainly the combat power? The best way this could be done is by launching a pre-emptive strike - an act which requires abundant and accurate intelligence inputs. Its feasibility, historically speaking, is not beyond doubt. Equally, doubtful is Army's ability, in face of multiple thrusts from West, North, East and even South, to maintain territorial integrity.

Secondary Role. Army assistance of civil Administration too has a

history. As far back as East India Company days, "Army was very often employed on two duties - revenue and police" mainly because of the paucity of apt men with the Civil administration. "The army was (also) very often employed on police duties", which entailed "the guarding of fairs and festivals, escorting treasures and many other matters of internal administration. It was only in 1843, that Lord Ellenborough introduced police battalions into some of the districts of North West Province. But the men constituting these battalions were regular soldiers, though officers were ex-police officers.

Examination of Secondary Role. There is no doubt that the Army has been called out for assisting the Civil administration with ever-increasing frequency on tasks ranging from flood control to restoration of law and order. Some states instead of becoming themselves self-reliant in equipment and man power, now rely on army assistance very heavily. The following aspects deserve consideration :-

a) *Military Equipment.* Military equipment like boats and bridges are combat equipment. Care must be taken to avoid their excessive use, for the obvious reasons of avoiding the erosion of its combat worthiness. States must be instructed to be self-reliant in equipment to meet the requirements arising out of natural calamities. For example, floods in India have become an annual feature and the states prone to floods must acquire equipment (including helicopters) to combat the natural disaster.

b) *Preserving Human Resources.* Human resources must be kept fully effective - both mentally and physically. Excessive employment in the maintenance of law and order and concomitantly, bringing the soldiers in close contact with their civilian brethren is wrought with the risk of politicising the men - a situation which should never be countenanced. Equally, army soldiers should not be committed on activities which are seemingly immoral, like, breaking strikes; they would incur the resentment of their civilian brethren who have gone on strike. Unless it becomes totally emergent, calling out the Army to break the strike must be a taboo. The concerned state or Department at Delhi should have their own territorial units for the purpose.

ROLE OF OTHER SERVICES

MAXIM OF INTER-SERVICE COOPERATION

Defeat of the enemy implies destruction and disarmament of his force and physical occupation of his territory and fortifications. While the destruction is achieved by the coordinated effort of the ground, sea and

air forces, for physical occupation, the primary instrument is the ground forces, i.e. Army. This, however, does not, in any way, depress the importance of the other two services without whose assistance, the Army would find it impossible to perform its role.

Since the Army operations are intimately linked with air support, it will be worthwhile to look at the implications of formless role of Air Force.

Under the circumstances, Air Force should be at liberty to contrive its own role. One can go "by usage" but that is neither neat nor functional. Let us examine the implications of this blurred state.

With this undefined role, the IAF should be at liberty to contrive their own primary role; possible ones are one of the following:-

- a) To gain and maintain favourable air situation.
- b) To support ground forces (Army).
- c) To combat any enemy threat from any direction and form in conjunction with other services, i.e. Army and (or) Navy.

FAVOURABLE AIR SITUATION

This implies :

- a) decommissioning enemy air fields in the tactical zone as also in depth.
- b) destroying hostile aircraft in the air as also on the ground. Destruction of aircraft in the air would mean strong air defence (AD) and this may lead to Air Force going AD "happy" which would militate against their choice of close ground air support aircraft.

SUPPORT OF THE ARMY

The Air Force functions in such a role would be :-

- a) Strategic and tactical reconnaissance.
- b) close air support of the Army in both defensive and offensive operations warranting complete knowledge of Army's way of functioning and the wherewithal it uses. This calls for aircraft whose staying over the target is good.
- c) Interdiction, mostly tactical.
- d) Air transportation of troops and logistics.

COMBATING ANY ENEMY THREAT EFFICACIOUSLY

This calls for highly efficient system of target identification and planning: to determine which service would play the primary role and what would be the role of the services other than the primary; indeed, only a highly articulated system can function: a centralised and unified command and staff system. Or else, it would result into fiasco with duplication and no clear-cut division of responsibility and authority.

It is truism that the evolutions of the Deep Penetration Strike Aircraft (DPSA) philosophy has been brought about by the Air Force's traditional primary role of striking deep into the potential adversary's territory. While much has been already said about the practicability of such a capability which is highly dubious in the environment of highly advanced and adequate AD Systems with the potential adversaries, and the usefulness of such a venture when our ground forces (the main agency of territory gaining) would find it quite difficult, if not impossible to exploit the strike of DPSA and thus rendering the whole operation abortive, it is worthwhile mentioning that money for the three services comes from a common "Kitty". Unnecessary expenditure by one service is bound to affect adversely the other. The case in point is IAF acquiring Jaguars: the same money could have got the Army many tank formations - an ideal acquisition for deterrence and a potent arm for fighting.

NEED FOR SPELLING OUT THE ROLE

Notwithstanding the roles of the other services, the only service that can bring about a 'coup' in this country is the Army: it has the management skill and wherewithal. It is strong and it is completely loyal to the Country (the National, indeed) and has many attributes: secularist, altruistic and apolitical. It is, therefore, imperative that the role of the Army and the other two services be clearly defined to deter the political authority from undertaking any such venture which would bring about a military take-over and in the process, jeopardise national security.

In Aid to Civil Authority: A Case Study of an Episode in Gujarat - 1985

MAJ GEN AFSIR KARIM, AVSM (RETD)

There has been a spate of communal riots and violent disturbances across the country in the wake of the general elections. In a number of places Army was called out to assist the civil administration mainly on the assumption that the police forces were ineffective, partisan and generally inadequate to deal with the problem. A study of the situations in various areas would, however, indicate that the local administration could have restored normalcy within a reasonable time frame, if left to themselves. As the recent disturbances were neither sudden nor unforeseen the deployment of troops in many places was merely to hand over the problem to 'some one else', due to political or other pressures rather than inadequate strength or inefficacy of the police forces. Calling out of Army assistance would normally be justified if the riots were so sudden or widespread that police forces could not be mobilised in the required time frame or the rioters or militants were using such sophisticated weapons or techniques which the police forces could not possibly match. No such conditions prevail during most communal disturbances.

It is now more or less a well established fact that political patronage of lumpen elements and a nexus between party bosses and crime syndicates is generally behind most, so called, communal disturbances. The situation is further aggravated by political interference with the functioning of the police. In certain states intimidation of senior police officials by politicians and indoctrination of rank and file by communal groups render the State Police Force incapable of playing any meaningful role.

A large number of articles in our national dailies frequently highlight these problems. Eminent columnists, well known police and civil officers have repeatedly made useful and constructive suggestions to improve this state of affairs but regretfully very little progress has been made. Army continues to be called out without due consideration and the police is presented in a bad light before they have a chance to sort out matters.

During the Seminar organised by the United Service Institution in Oct. 1986, various norms for Calling military assistance by Civil Authorities were discussed at length. Important and useful suggestions emerged at the end of the Seminar. Nothing, however, has since been heard of the status or the implementation of these recommendations. It is doubtful even if the

Army itself took any meaningful follow up action. The present state of affairs once again brings in focus the urgent need for laying down well defined norms for calling Army assistance because of the undesirability of prolonged or repeated Army deployment in sensitive politico-communal situations. It is intended here to highlight some aspects discussed during USI Seminar through an episode in Gujarat in 1985. This is with a view to draw attention of powers that be to the urgent need of taking certain actions in the matter. The episode narrated here will also illustrate that, at times, our troops are placed in sensitive politico-communal environment for prolonged periods mainly due to lack of comprehension (and due to insensitivity) of the actual situation on the ground by various senior civil and military authorities.

GUJARAT : JUNE 1985

The events narrated here pertain to a period of merely 48 hours out of nearly 120 days of Army deployment in the city of Ahmedabad in 1985. In June 85 Army had been in charge of the Walled City of Ahmedabad for over a month and the police had been confined to their 'Thanas' and posts. The City had been curfewbound off and on for several weeks due to sporadic communal violence. The atmosphere was highly charged due to prolonged anti-reservation agitation and communal tensions. In such conditions the police of Ahmedabad was inactive, even hostile to the Army. The troops were expected to prevent riots, control anti-government agitation and generally look after the needs of the Citizen. The Army contingents took orders from the Government of Gujarat through the Divisional Headquarters located in Ahmedabad on all policy issues and the Army was given no special powers. They had to hand over all miscreants to Police Headquarters. In most cases even those who were caught red handed came back from Police custody the very next day; some came back in air conditioned cars.

In such circumstances the traditional Sri Jaggannath Rath Yatra and Eid-ul-Fitr happened to fall on the same day, ie on 20 June 1985, by some strange coincidence. Before narrating the main events a little background of the problem and the layout of the walled city would help in better understanding of the situation.

PECULIARITIES OF THE WALLED CITY

Out of approximately 25 lakhs population of urban Ahmedabad nearly 12 lakhs resided in narrow confines of the Walled City. Even now one entered the City through its twelve gates, although the wall had disappeared a long time ago. People are packed here like sardines and live in a maze of ghetto like structures, criss-crossed by narrow lanes. Amazingly this

crowded township is still the hub of all major business and political activities. The main peculiarity, however, lies in the 'POLs' of the Walled City. Each 'POL' comprises a labyrinth of wooden houses along a narrow main street with crooked by-lanes branching on either side with gates to bar entry. Each 'POL' belongs to one homogeneous caste or community. News is flashed (mostly sensational rumours) through scribbling, of information into a specified wall in a 'POL'. Most 'POLs' terminate into a dead end. A 'POL' can therefore prove a death trap for intruders or even law enforcing agencies. A few higher structures built near the market squares are used as watch towers. Mobility of any kind except on foot is confined to the main streets and market squares. Such a layout makes pursuit of miscreants and search and cordon operations extremely difficult if not almost impossible. The communal riots here need not spill out to the streets at all, as they can be more easily fought to the finish in the 'safety' of the 'POLs'.

Population complex of the Walled City is also unique, each caste or community lives in a certain well defined area. The main localities and the mix of population is as shown below:-

- | | |
|---------------------|--|
| 1. KALUPUR-DARYAPUR | Over all mixed with various states and communities predominant in their 'POLs' |
| 2. SHAHPUR | 50% mix of Hindus and Muslims, better educated classes stay here. |
| 3. JAMALPUR | Predominantly MUSLIM |
| 4. KHADIA | Predominantly HINDU (Higher castes) |

BACKGROUND OF THE PROBLEM

In Jan 1985 Gujarat was a stable, well administrated State under a Congress (I) Government. In the last elections held in 1980, Congress (I) had achieved a remarkable victory on 'KHAM' platform - that is an alliance of Kashtriya-Harijans-Adivasis and Muslims. This to an extent had alienated the highly vocal 'Patel' Caste. The trouble began when the government announced a 28% increase in reservation for 'socially and economically backward classes (SEBC)' and other backward classes' (OBC). This meant a reservation of seats in professional courses etc. amounting to 49% (21% existing for Harijans and Adivasis plus 28% announced for SEBC and OBC). This was activated in Jan. 85 on the eve of the new assembly elections, obviously for electoral gains. It paid dividends as Congress (I) won the assembly election in March 85 with an overwhelming majority. But as soon

as the new government settled down, a mass anti-reservation movement was launched. The agitation soon became stridently anti-Chief Minister and turned violent. Even when the new reservation policy was held in abeyance the agitation for the removal of the Chief Minister continued unabated.

The government tried to suppress the agitation through harsh police action and gave police a free hand. This led to a Police vs high caste/student confrontation and when the police high handedness was condemned all round, the police sulked and finally revolted ; resulting in total break down of law and order machinery.

As the agitation against the reservation policy and the chief minister gradually became more vociferous, it somehow, started turning into a communal confrontation. This communal trouble was, however, without the characteristic build up of communal tension and was perhaps contrived to discredit the anti-reservation movement. Communal passions can be easily aroused in a City like Ahmedabad particularly in the Walled City which has been like a powder keg since the widespread communal/caste riots of 1969 and 1981.

BAN ON RATH YATRA : 1985

The traditional annual Sri Jagannath Rath Yatra commences from Sri Jagannath Temple and zig zags through all the localities of the Walled City. It has deep historical, religious and cultural roots and even today transcends various religious and caste barriers. In 1969, however, a communal riot during Rath Yatra took a toll of nearly 600 lives. Actually the procession is so huge and unwieldy that any mischief or panic can cause large number of casualties.

The GOC at Ahmedabad being fully aware of 1969 background therefore approached the Chief Minister to clarify matters regarding the passage of the Rath Yatra through the walled city. The Chief Minister however told the GOC that he had already instructed the Police to prevent the traditional gathering at the Temple hence there will be no Yatra this year. Considering the current mood the GOC expressed his doubt if the Police could prevent people from gathering at the Temple. The answer was 'we will wait and watch'.

The Yatra procession normally is about a lakh strong and has assortment of carts and animals in the van. As the event approached near and no firm policy decision was forthcoming from the government regarding the passage of the Yatra through the Army controlled walled City, the local Commanders prepared for the worst. After taking various matters into

considerations it was decided that the troops will not open fire on any religious procession or gatherings for defying curfew, unless they indulged in violence. This applied both to Rath Yatra and P'd festivities as defying of curfew in such circumstances was expected. In the meanwhile the Brigade Commander concerned carried out discreet talks with the organisers of the Yatra and mahants to assess the situation. It soon become evident that no one will be able to convince the people to change the traditional route and firing of any kind to block their route within the walled city would result in a disastrous stampede, if nothing else. The police plan to block the route of the Yatra at the Temple gates, by parking a few police vans across the road was obviously just a symbolic gesture to carry out government orders.

On the night of 19/20 June the Army Control Room received reports that a large number of people, cows and camels had already gathered near the Temple and more people were coming. At this stage the GOC rang up the Chief Minister, to apprise him of the position and obtain his latest views on the Yatra, but found that he had rushed off to Delhi. The Home Minister was not available either. The Chief Secretary when apprised of the situation on the phone said 'The Chief Minister is away, do whatever you can, in any case our writ does not seem to run'.

The Army by now had contacted the Mahants and other influential religious heads to convince them not to defy the curfew in the walled city. They all gave assurance of their peaceful intentions but said that the government had no business to ban a religious procession, hence they will not obey these orders. They are not defying the Army, only the curfew imposed by the government.

Main steps/decisions taken by the Army authorities under the circumstances were are under :

- (a) additional battalions were inducted into the Walled City and deployed along the traditional route of the YATRA with a view to prevent attack on the 'Raths' by miscreants and to prevent the processionists attacking the houses of other communities enroute.
- (b) Stop the movement of the 'Rath' in case processionist indulged in violence.
- (c) Steps to limit damage in case of stampede or violence.
- (d) Arrangements to divert the YATRA through a more open route around the walled city in case of major communal trouble in any particular locality or any section of the walled city.

Although more than two Brigades worth were deployed to prevent trouble (there was room for no more !), if the massive procession turned violent there would be a major tragedy.

EVENTS OF 20TH JUNE 85

Early in the morning of 20 June 85, two temple elephants came out of the Temple gates and removed the two police vans placed on the road to block the route as if it was routine work. The police of course watched helplessly and made videos. The YATRA was well under way by 8.30 A.M. The significant part was that it became a means to defy the Chief minister, who was profusely abused in between the traditional slogans of 'Makhan Chor'.

Curfew was locally relaxed between 8 am to 10 am in sections of the walled city to enable Muslims to offer their Id prayers. The local Commanders in various areas also mounted guards near big mosques.

By this time the 'RATH YATRA' was approaching the walled city through 'Prem Darwaza' along its traditional route. The procession had now swollen to a lakh plus. In the vanguard were several large herds of cows, followed by camels and carts of several varieties. In the centre of the procession were three 'Raths' with the idols. They were guarded by Temple Elephants and an 'armed temple escort'. The din, the dust and the sheer size of the YATRA would make spectacular scenes from 'Ben Hur' look quite small in comparison.

It was obvious that it would be physically impossible to block or divert the YATRA at this stage. An effort was made nevertheless, but the organisers expressed their complete helplessness, due to religious fervor of the surging crowds. As the vanguard of cows leaned against the high barbed wire Army barricade at Prem Darwaza, twenty bare chested young men came forward, squatted near the barricade and asked for an audience with the local 'Army Commander'. To the Brigade Commander who was present there they said, "You are our own Army, we have no quarrel with you, but the Chief Minister has no right to ban or divert the Yatra, hence we shall follow the traditional route. We will commit no offence we assure you. You can shoot twenty of us now or any time later if the 'Yatra' indulges in violence. But please do not bar our way - nothing will stop us". By this time the main body was pressing against the vanguard. The sheer momentum of weight and numbers swept everything in front of it like an avalanche. The cows and camel carts were swept past the huge barricades as the procession poured into the walled city like high flood.

By 1300 hrs I'd celebrations were over without any major incidents but the Yatra was stoned twice. Both times when warnings had no effect Army had to open fire to pick off miscreants on distant roof tops and houses. At one point fire was opened on some processionist who indulged in looting of shops, after the 'Raths' had crossed the area. It must, however, be mentioned here that 'whoever' controlled the processions somehow ensured, by and large, that the crowd refrained from violent acts. By the way, at this stage casualty figure stood at '5'- ridiculously low from Ahmedabad standards.

As the procession turned towards Jamalpur on the last leg of its journey to the Temple, a rumour was spread that hundreds of Muslims have been killed by the Army to protect the 'Raths'. This was calculated to create a major show down in Jamalpur, which was a predominantly muslim area. However, some quick thinking and actions on the part of the Unit Commander in charge Jamalpur, saved the situation. This Commanding Officer gathered several grey heads and bearded elders of Jamalpur and persuaded them to announce that :

- (a) People of Jamalpur will be protected by the army. No one will touch you until you yourselves indulge in violence.
- (b) Rumours regarding hundred of Muslims being killed by the Army are false, not more than 'five' people in all have died and not all of them were Muslims.
- (c) People were reminded that, after all the Army had guarded 'them' successfully during I'd prayers ; now they must trust the Army and stay indoors.

This worked somehow and the 'Raths' finally crossed Jamalpur without an incident.

in the evening, the Chief Minister returned suddenly from Delhi. Various higher Headquarters also came alive now. The C.M. praised the police profusely for their good work and also thanked the Army. He remarked that those who wanted to plunge Ahmedabad into chaos with a view to oust him had failed. No body seemed to appreciate that a major national disaster had been averted only due to the ingenuity, cool courage and deft handling of the situation by various Junior Commanders and their men.

Well that was not all, before the dust settled down hundreds of Muslims women swarmed in some narrow streets of Kalupur and Daryapur with copies of the 'Holy Koran' on their heads. They blocked the roads

and carried placards which said 'Killer Army Go Back'. Finally they settled down on the streets and recited 'Koranic Verses'.

The young battalion Commander in charge, soon found out that some men from a fundamentalist organisation had forced them to come out and stage this 'Dharna'. The Dharna continued for a good twelve hours when somehow the Battalion Commander convinced the leaders of the 'Dharna' that he was withdrawing his troops from the area and handing it over to the Armed Police since they do not want the Army. Although this was only a ruse, this had an electrifying, if a pathetic response. A large number of women started howling and begging the Battalion Commander not to withdraw. Some even rushed forward and clung to Army vehicles, even to Jawans feet and begged them to stay on. Dharna was of course withdrawn within no time.

The next day was a busy day for the Divisional Headquarters at Ahmedabad. All the events of the last two days had by now been flashed by national dailies including the photographs of women clingings to Army vehicles and men. These photographs greatly upset higher HQ. How could women possibly manhandle (women handle!) our men and equipment was the refrain. Explanations had also to be given to those who wanted to know why 'Rath Yatra' was allowed through the walled city at all; why did the Army not open fire to stop the 'Yatra' and so on. Actually it was rather late in the day to wake up to the situation!.

The lessons from the above episode are loud and clear and therefore need not be repeated. It was undesirable and unnecessary to expose troops to such a politico-communal situation when the police forces and the state administration should have handled it.

The situation basically needed a political solution, and soon after when the Chief Minister resigned, the trouble in Gujarat subsided.

Arms Proliferation in the Third World : The Rationale of Defence Exports from India

WG CDR P KHOKHAR, VM

*"Among other evils, which being unarmed brings
you, it causes you to be despised".*

*Niccolo Machiavelli,
The Prince (1513)*

INTRODUCTION

"In the next two years their strength will be reduced by 500,000 men and substantial cuts will be made in conventional armaments."¹ "Our vision remains that of a continent where military forces only exist to prevent war and to ensure self defence, not for the purpose of initiating aggression or for political or military intimidation".²

These two historical statements, the first by Mikhail Gorbachev and the second by the North Atlantic Council Meeting drew the attention of the world to a major milestone in disarmament diplomacy. Following the INF Treaty, these statements ought to have heralded an era of stability and peace, which should have been welcomed with great rejoicing. However, apart from the niceties of political statements, no earth-shaking shift in perceptions and policies has occurred in the Third World. In effect, the INF Treaty has driven even NATO to place greater reliance on its remaining forces and caused a greater sense of urgency to update/modernize their conventional forces.³

The ultimate measure of a military force is its ability to fight today. Even deterrence, the strategy of forcing an adversary to keep the peace, by making victory in war impossible or not worth the price, derives from that. For any nation that is developing, it has to be serious about its defence obligations. In the recent past developing nations have endured a variety of military and economic security threats, emanating from developed countries.⁴ The Arab nations after the Oil Cartel, Nicaragua, Guatemala, Malaysia and India are some of the nations so affected. Especially since World War II have the emergence and confluence of many political, economic, technological, strategic and military factors of world wide magnitude produced a genuine system amongst Third World countries, which despite discontinuities, aberrations, contradictions and ambiguities, indicates unmistakable signs of being increasingly conscious of its independent identity.

It is undeniable that if power is equated with military force, the latter must be a viable one. In this century nationalism has been on the rise in Asia, Africa and Latin America. Third world nationalism has often been built upon pride in ancient civilisations, where culture and power grew together. In some other nations the upsurge has been powered by a spirit of political resentment against Western imperialism. Therefore, all developing nations feel contrary tugs towards cooperation and conflict, towards accommodation and rivalry, but all have a common desire in these conflicting situations to be able to speak from a position of strength. Military might forms part of this strength.

LEGITIMACY OF ARMS PRODUCTION

The US and USSR still dominate the international arms transfer system.⁵ However, there are definite indicators to lend validity to the claim that a rise in the number of suppliers has reduced the erstwhile influence of the super-powers in the arms trade. While a number of these suppliers are of European or Chinese Origin, the balance are constituted of developing countries. Sale from countries other than the Super Powers, though sometimes with the latter's tacit approval, seldom carries pre-conditions and is a purely commercial transaction. France is possibly the only major Western nation, that regards arms sale as a strictly commercial enterprise at par with the sale of champagne.

While major defence items like, aircraft, ships or tanks are seldom available across the counter from developing nations, smaller arms, ammunition and electronic items used in defence packages can be procured with relative ease.

The super-power influence still dictates certain arms transfers. The price, of course, extracts technological know-how, especially from the West. China's stoppage of sale of Silkworm missiles to Iran and Brazil slowing transfer of military technology to Iran also, were both in return for promises of access to US technology.⁶ Whilst this may have influenced certain cases of arms transfer, the overall pattern of transfer of arms from developing nations to other developing nations shows a steady increase.

The term 'arms control' has, so far, never been applied to transfers between developing nations, since the quantum involved is relatively small. Neither is arms control, a substitute for modernisation that enhances capability. Failure to modernise undermines tactical stability. This line of thinking has long influenced the policy makers of India's defence production.

The advent of arms production programmes in Third World countries can be attributed to several conflicting motives and expectations. These can broadly be classified as:-

- (a) For politico-military reasons. In a number of developing countries the urge for self-sufficiency and to reduce dependance on industrialised nations, has led to domestic arms production.
- (b) A perception of threat from neighbouring countries can also precipitate a move towards domestic arms production. Israel is a case in point.
- (c) Occasionally it is claimed that the arms industry can promote regional dominance.

The reason common to all is purely for economic gain. The global transfer of arms has accelerated during the last decade. The era of cheap and cheerful transactions is over. Fewer arms have been supplied under military assistance programmes and more on commercial terms.

The establishment of the domestic arms industry is often predominantly a political act which has strong economic and technological reasons. The domestic capacity to produce weapons is a means of isolating oneself from the political and commercial pressures which the suppliers of advanced weapons, both Governments and firms, can apply. Therefore, for whatever reason India may choose, the production of arms is a legitimate requirement.

Arms production is also seen as an aspect of national security, self-sufficiency and modernisation. All these factors present an adequate impetus to strive for arms production and export.

ADVANTAGES OF EXPORTING ARMS

To be able to pursue a policy of exporting arms, it is first necessary to comprehend the psyche of the buyer, ie the importers motivation and decision making criteria. This can broadly be analysed by the following factors:-

- (a) Level of economic and technological development.
- (b) Geo-strategic factors, which include threat perception, physical size and major power patronage.
- (c) Indigenous arms production capabilities and ambitions.

The interplay of political and economic factors strongly influence a states decision about the type of arms to purchase and the source of purchase. The demand side of the arms market is characterised by forces strongly embedded in governmental and development process, and strategic perceptions. Therefore as long as these are individual and at variance with others, the demand for arms will remain robust.

Suppliers have vested political and economic interests in making arms available. The major advantages of selling arms abroad can be for the following reasons:-

- (a) Hegemony factor, which allows a supplier to achieve a power of dominance over the receiving country.
- (b) The economic profitability factor.
- (c) The restrictive factor whereby the supplier declines to provide arms to other countries if this is likely to operate against the economic or regional interests of the supplier.

THE ARMS MARKET

In 1987 the world's total military spending crossed the \$ 1 Trillion mark.⁸ Of this, the developing countries spent \$ 156 billion - a mind boggling figure. The arms industry boasts of being the third largest in the world, after the baby and food producing occupations. But the international defence market is quite unlike any other market. In this market governments play a prime role. The relationship between private, public or quasi-public arms companies and governments is shaped not only by national security considerations. In recent years the percentage of GNP that a government has directed into defence spending has come under public scrutiny. But when it is coated with the promise of export and promotion of the industry, it swiftly becomes palatable to the most hardened arms control activists.

The arms market also attracts patrons from amongst countries engaged in using force within a sphere of influence that does not attract much attention from the rest of the world. This force is used for purposes consistent with the dominant interests indigenous to the region. A classical example is of the IPKF Ops in Sri Lanka and the arms procurement by the LTTE from sundry sources which draws no comment from any source. As a result of a total absence of any ethical code of conventional arms production, a very large number of countries have acquired the ability to produce technologically advanced systems, making the international arms market more competitive both in quality and price.

THE INDIAN ARMS INDUSTRY

In 1945 only Argentina, Brazil, India and South Africa, in the Third World possessed domestic arms industries which produced weapon systems, other than small arms and ammunition.⁹

In the rank order of major arms producing nations of the Third World, India has been ranked second only to Israel.¹⁰ This is based on the number of categories of weapons produced and including the indigenous component. China was not included in that study. However Indian defence production continues to be plagued with non-adherence to production schedules, lapses in quality control and far from optimal utilisation of production capacity. A new approach for the nineties is needed. The requirement would be not only to meet certain domestic needs, but also enhance the production in order to become an export oriented industry.

BACKGROUND OF DEFENCE PRODUCTION

In a socialist economy, the Government deemed it fit to reserve the arms industry for the Public Sector. Components of military hardware have been assigned to the Private Sector, but never in substantial numbers. Defence planning was first introduced in India, as late as 1964.¹¹ However since eight Ordnance Factories existed in India at the end of World War I and 11 by the end of World War Two, the base already existed for defence production. Today over 35 Ordnance Factories and eight giant Public Sector Undertakings for defence production exist in the country. But the major achievement has been in the setting up of a large Defence Research and Development Organisation (DRDO) which functions under the aegis of the Scientific Advisor to the Raksha Mantri. The diversification of research is so vast that almost all areas of defence are covered from space to underwater communication. Thus a broad base exists in the country for manufacturing a wide range of weapons and systems. However, despite this behemoth infrastructure, indigenous development of defence technology has been disappointing, especially when compared to that of Israel, China or even Brazil. Indian defence production still depends, to a large extent on foreign collaborations, technology, designs and licences. While paucity of funds has oft been quoted as the scapegoat for shortfalls, the major reasons, however unpalatable, are broadly as follows:-

- (a) Lack of accountability.
- (b) Wastage of manpower and resources.
- (c) Lack of productivity orientation.

To be able to compete in the world Arms market of the nineties, the Indian arms industry needs to look into the following aspects:-

- (a) Make a long term commitment to export arms.
- (b) Capital Investment.
- (c) Enhance quality control and productivity.
- (d) Introduce dynamic and aggressive salesmanship.

Experience and proficiency levels are built up slowly. The annual report of the MOD for 1988-89, which was released on 17 April 1989, stated that the national policy on defence production aims at the modernisation of arms and equipment and achievement of maximum degree of self reliance. These are age-old cliches and mean little unless a stringent time frame is specified. While the value of gross production of Ordnance Factories was shown as Rs 1842 crores, as against a target of Rs. 1650 crores and that of Public Sector Undertakings was Rs 2056 crores for 1987-88, the defence budget showed a decline from Rs 13200 crores in 1988-89 to Rs 13000 crores in 1989-90. In real terms this means a reduction of 10%¹². Strangely and sadly enough, while self-sufficiency is a commendable aim, no thrust was projected towards export of arms. However the Defence Minister's statement in January 1989 did give an indication towards a shift in thinking. Shri KC Pant stated that India's armament factories have the potential to capture a part of the international market in weapons, equipment and systems. He also said that vigorous efforts should be made to utilise this potential.¹³ To be able to do so a military industrial strategy has to be drawn up.

MILITARY-INDUSTRIAL STRATEGY

The size and diversification of an arms industry are dependent on the structure and capability of a country's manufacturing industry and the R&D output to promote the indigenous content. These factors are closely related to its industrial strategy. China's industrial strategy with regard to the arms industry is a classical example. China's approach - low prices and no political strings - has helped turn it into the fourth largest supplier of arms to the Third World. From 1984 to 1987 it sold arms worth \$ 5.2 billion to Third World clients. The major exports were of aircraft, tanks and missiles. The last item is rather difficult to procure from other sources. From the intake it ploughs back 85% of the profits into the defence forces, as against 3% which the US Dept of Defence receives on US foreign arms sales.¹⁴ The Chinese use this hard currency to revamp their own arsenal and to create a mobile and high-tech force. In addition to outright sale of arms, China also sells technology. The Iranian 'Ogab' (Eagle) short-range missile was

designed by the Chinese and first fired in December 1986. China and Pakistan plan to co-produce jet trainer aircraft equipped with instruments made by Rockwell International. This equipment may not have been made available to China under US export restrictions, but since collaboration was with a country friendly to the US, the sanction was readily obtained.

Several unholy alliances have also been made in their quest to promote arms sales. China has bought more than \$1 billion worth of military technology from Israel during the last decade.¹⁵ The Israelis have helped China with missile, tank, sensors and aircraft technology. The Israelis are also reported to be willing to provide China with a sophisticated radar system, originally designed for the, now defunct, Lavi fighter. To handle these large and sensitive deals, the Chinese have an agency, Poly Technologies Inc., which is an aggressive sales arm of the PLA. A number of seedy Hong Kong companies are used as a front, but the China North Industries Corp (Norinco) is the ultimate Chinese company involved. However, Poly Technologies, which is listed as a unit of China International Trust & Investment Corp (the country's largest investment bank), is actually the direct sales and procurement arm for the PLA's GHQ. This allows Poly Technologies to fill orders directly by pulling out weapons straight from the PLA's stockpiles. The Industrial strategy therefore emerges with clear-cut goals & objectives.

The military-industrial complex in India is under public scrutiny. The recent arms deals (Bofors, HDW) and the controversy accompanying them, has undermined national purpose. As specific charges emerge, the public may conclude that shady deals are typical of the defence acquisition community, without exception. Our domestic industry falls short of meeting our own defence needs. However, our high-tech weaponry dictates more dependance on foreign components. Hence advances in technology must be matched with corresponding advances in the manufacturing industry. Acrimonious debates on the ethics of arms procurement can only do catastrophic damage to other aspects of military capability. The answer lies in a strong arms industry which is essential for security.

The morality of strange bedfellows must not be permitted to undermine the arms industry. China, a fervant supporter of the Palestinian cause, has no diplomatic relations with Israel. Iran purchased weapons from Israel during its conflict with Iraq despite the Ayatullah Khomeini's views on the very existence of Israel, which were no secret. China has devised an elaborate arms-sales network involving front companies, Third Nation intermediaries and independent arms merchants, despite being a totalitarian state. In the Indian democratic set-up, the fear of exposure is far greater and arms deals

do invite public debate. Therefore, the institution of intermediaries and front offices can only promote aggressive selling, which is sadly lacking in our arms industry. HAL's several bids to woo foreign buyers by demonstrating our aircraft, both in individual countries, like Nigeria and Malaysia and at international air shows at Farnborough, have not brought in a single order. The reasons are several and of varying nature, but the result still spells zero.

Our policy of non-alignment, adherence to principles of non-violence and ethical issues are off-quoted as factors influencing our thinking on arms sales. Despite the Defence Ministers purported statements on the official line of thinking, no clear-cut policy has emerged for setting up the infrastructure for exporting arms.

A weak industrial infrastructure imposes technological limitations on arms production. Our country does not suffer from this malady. But the military-industrial strategy has not been clearly defined. Two basic strategies need to be firmly adopted.

- (a) Import substitution.
- (b) Export orientation.

Each of these will affect the kind of arms produced. The first factor has been given some importance. Self-sufficiency stems from it and import-substitution industrialisation has been adopted as a growth-orientated industrial strategy. But the major problems of this industrialisation is the small size of the local market, which is both restricted and heterogeneous. The technologies used for production are capital intensive. During 1987-88 only nine projects of the Ordnance Factories were completed with an investment of Rs. 155 crores. Today 29 on-going projects involving an investment of Rs. 2072 crores are in various stages of implementation and 23 projects with an investment of Rs. 1908 crores are under planning.¹⁶ The high-profit of these colossal investments is not their productivity factor, which by international standards, is abysmally low and cost competitively too high, but the fact that some of these investments have created new capacities for production of modern and sophisticated defence stores. Obviously there is a close link between import-substitution and arms production. The limited demand of the domestic market, dictated by the budget of the armed forces has resulted in oversized factories, with substantial cost over-runs. While foreign exchange expenditure is eased by local production, import of production technology to set up the various plants has made the Indian defence industry a major contributor to the Public Sector Undertakings, which the government fosters, despite losses. The exact cost calculations

on arms production are not available to the public. The IDSA stated that despite the long term experience of arms production in India 'the implications are that, for modern and sophisticated weaponry, dependence upon the four major arms producing nations (USA, USSR, France and Great Britain) cannot be avoided.¹⁷

Export orientation has long taken a back-seat in the Indian arms industry. The capacity created within the industry is often left idling for lack of direction. But there are reasons, listed below, which indicate the close connection between an export-orientated industrialisation strategy and domestic arms production.

(a) The industry is totally under Government control and hence any official policy devised can be uniformly applied to this sector, without prolonged negotiations as would be necessary with the Private Sector.

(b) Since the industry is Government controlled, the removal of trade restrictions and political constraints can easily be done, once a policy decision is taken.

(c) 'Critical' or 'sensitive' technology may not be readily available to a large number of importers. The Government can decide on export of expertise, as demonstrated by the Chinese while selling missile technology to Iran and Saudi Arabia.

(d) Utilisation of the capacity created through capital-intensive investments.

(e) Collaborative ventures should be more readily indulged in, with the total accent on export-orientation. Though no foreign investor is likely to supply the capital share in investment, technology transfer forms an important part of collaborative ventures.

(f) Creation of a free-production and export-order section in the industry. This section would negotiate, produce and sell arms as per the requirement of the customer. Obviously the economics must be beneficial to our country. But this concept is possible because of the broad based structure of our arms industry, which covers diverse items like boots, supply dropping parachutes, 105 mm spare barrels for tanks, Battlefield Surveillance Radars, aircraft parts (undercarriage parts for BAe ATP and the Airbus A-320), avionics and specialist vehicles, amongst several others.

EXPORT OF DEFENCE EXPERTISE

India's defence expertise has been built over a long period and in recent times been honed by four intensive conflicts. Though several modernisation schemes are in the pipeline, the size and shape of the armed forces has been generally accepted to have stabilised. This has caused several aberrations, especially within the Army and in the IAF, in the man-power cadre and career prospects of personnel. During the period 1962-67, there was an intensive drive to revamp the armed forces and huge recruitment intakes were resorted to. While the army was able to streamline its induction policy to an extent, by offering emergency commissions and thereafter retrenching a large number of emergency commissioned officers, the IAF, because of its capital intensive pilot training programmes, absorbed the extra intake. The obvious fall-out of such a policy has now manifested itself, when these officers have reached the stage in their careers where promotion is vacancy based by selection. The army too has a bulge at the Colonel to Brigadier level since it did absorb some of the EC officers. These officers, who are highly trained and have mustered experience over a span of two to two and a half decades, are now given the option to leave the service, if superseded. This supersession is purely due to the limited number of vacancies available at higher ranks and is no reflection on the individual officers calibre or expertise. Their retention in service is without personal motivation. Their release to the civilian stream adds to the unemployment crisis of the country at large and often leaves the individual attached to a job unrelated and undemanding of the expertise that he has collected over an extensive period of time. Jawans and airmen both from technical and non-technical backgrounds, also leave early, though not for the same reasons. Their expertise also carries immense potential. The solution, so far adopted brings satisfaction neither to the service, nor to the individual. It is a national wastage of trained and experienced resources.

The answer lies in creating a 'manpower resource bank' for the defence industry. Since the domestic industry is generally saturated and has less demand for managerial appointments as against either technically qualified and 'blue collar' workers, a two prolonged approach to the optimal utilisation of the manpower resource bank must be made as suggested below.

(a) Amongst other ills that plague the defence production sector, is one of indisciplined labour, strengthened by trade unions. A gradual but steady inflow of ex-defence personnel into this sector would create a disciplined work force, which can be driven by productivity incentives. A total reversion to civilian ranks may cause legal embarrassments if this force is refrained from joining trade unions. Therefore, a quasi-

military status may allow the government from circumventing this problem. Since retired personnel do stay on the reserve list for a specified period of time, either retirement can be postponed and manpower channeled into this sector under the guise of deputation, or suitable legislation be enacted to debar quasi-military/defence industries employees from getting involved in trade unionist activities. This is merely the concept and the total package would require careful deliberations.

(b) There is a great demand amongst Third World Nations for military expertise both for training their personnel and for running defence establishments. It is unlikely that very many Third World Nations can provide this resource both in terms of numbers and the experience. Indian defence expertise is being wasted. The manpower resource bank can identify regions/countries and draw adequate and suitable manpower from within its stock. This concept does not envisage a mercenary status for our personnel. It merely suggests optimal utilisation of their expertise. Pilots, engineers, military tacticians, technicians are some of the category of people in great demand. Within the service, men learn trades as rudimentary as carpenters, automobile mechanics, radio repairers etc. These too are demanded by several countries, generally through private agencies. These agencies normally exploit the individuals and neither credit nor cash comes into the country's exchequer. The export of defence expertise would ensure that benefit would accrue both to the individual and to the country. The foreign exchange, which is repatriated, must again be recycled within the defence sector in order to promote this industry to further growth.

CONCLUSION

A vigorous and self-sustaining defence industry is essential for the economic and diplomatic future of India. The net impact of increase in demand for defence products, without strings, in the Third World, has resulted in a dramatic increase in the profitability of the industry. This should lead the Indian defence industry to rationalise their options in order to enhance profits. If the current economic transformation is linked with the application of high-technology, it follows that defence industries must play a major role.

Military demand is not created by market forces but by political choice. The political justification reiterates the need for national security. But a defence production policy which undermines the welfare of a nation by inadequate production and under utilisation of production capacity, cannot be justified on the mere grounds of self-sufficiency. There is an urgent need

to redirect the resources and technological effort of defence production into areas that more directly benefit the economy and the people. For far too long this country has had powerful armed forces without a domestic arms industry to support them, either directly through self-sufficiency or through the hard currency that arms exports bring in. Defence exports can open up new markets and potential for economic regeneration.

The economic effects of defence exports must be recognised at the political level. The priorities of the defence production sector must be reorganised to be more responsible and responsive to the industrial impact of its export options. A high degree of government involvement in establishing a firm policy on arms exports has been followed in several countries, including Third World countries like China, Israel and Brazil, with much success. In India a coordinated defence exports policy would require more capital investment both for R&D and initial cost of establishing production lines. These could be abated by concentrating on area where adequate headway has already been made. The absorption of a large proportion of the pool of skilled manpower is definitely the most significant contribution. The additional costs incurred initially can be defrayed by the export of expertise through highly trained and experienced personnel under government-sponsored schemes.

Rather than placing all the emphasis on self-reliance, the current policy needs to place more emphasis on the export of arms, technology and expertise. Such changes in policy would bring about a radical restructuring of the Defence Production Sector. Detailed planning and careful implementation is a necessity if defence products are to be sold abroad. This policy should be conducted in close cooperation with the technological expertise available within the country.

Policies on the scale suggested here require deliberate planning and dynamic execution, but more than this, they require a commitment to a radical reorientation of the industrial structure of the defence industry. At the core of this process is the need for a realistic assessment and firm specification of our defence posture and foreign policy. It is apparent that total stress on an inwardly orientated defence industry is the major factor which erodes the competitive edge of the industry, which, in turn, has a detrimental effect on production and the balance of trade for defence. The failure to develop a radically different and export orientated policy can only result in continuation of the stalemated norm, whereby self-sufficiency eludes us and imports gnaw ferociously into our economy, without the benefit accrued by defraying the costs from our own defence production sector.

NOTES

1. Excerpt from the speech of Mikhail Gorbachev at the UN General Assembly on 07 December 1988, (*Pravda* 08 December 1988).
2. Excerpt from a statement issued by the North Atlantic Council Meeting in ministerial session at NATO HQ, Brussels on 08 December 1988, (*NATO Press Service*).
3. "After the INF Treaty", Gen William L Kirk, USAF (*Air Force Magazine*, April 1989).
4. "Security Issues in Global Politics" Charles Lockhart (Free Press, Macmillan Publishing Co, 1981).
5. "Military Assistance in Recent Wars", Stephanie G Neuman, *Foreign Affairs*, Summer 1988.
- 6,7. "The Priorities of Arms Importing States Reviewed", Frederic S Pearson, *Arms Control September 1988*.
8. *The Hindu* 07 August 1989.
9. "World Armaments & Disarmaments" *SIPRI Year book 1981* (Philadelphia Taylor & Francis 1981).
10. Herbert Wulf, "Developing Countries" from "*The Structure of the Defence Industry*", Nicole Ball & Multon Leitenberg (Croom Helm, 1983).
11. Rajesh K Agarwal, "*Defence Production and Development*" (Arnold - Heinemann, New Delhi 1978).
12. The Defence of India Review, 1988-89 *VAYU* III/1989.
13. *International Herald Tribune*, 31 Jan 1989.
14. "Why China Sells Arms" - *NEWSWEEK* 11 Jul 1988.
15. "The Israeli Connection" - *NEWSWEEK* 11 Jul 1988.
16. "The Defence of India Review", 1988-89, *VAYU* III/1989.
17. PR Chari, "Indo-Soviet Military Cooperation : A Review", *STRATEGIC DIGEST*, May 1979.

Conventional Defence Initiatives in the 1990s

MAJ GEN VK MADHOK, AVSM, VSM (RETD)

During the next 10-20 years, besides the race for space and keeping an open mind on 'Nuclearology' the defence forces as well as the country need to focus their attention on : application of technology, indigenisation and self sufficiency; towards evolving a 'Total Force Concept'; use of space systems to support various functions on ground and for improving mobility and logistics. While the Super Powers and advanced countries are competing for industrialisation and militarisation of space, they have also published White Papers reflecting the initiatives, they intend to take towards restructuring their armed forces during the next 15-20 years. Third world countries, heavily dependent on imported technology are in a dilemma ! They cannot concretise their initiatives so long as they are not self sufficient and perforce have to react to imported technology! Indigenisation as such assumes an important place on the agenda for conventional defence initiatives. In our case, a White Paper on defence which is long overdue, would clear the ambiguities and take the citizen and the civil entrepreneur along in handling such proposals.

INDIGENISATION AND SELF SUFFICIENCY

A question invariably arises as to why industrialise and indigenise in the defence sector when equipment and weapons can always be purchased from abroad? Indigenisation is essential as it would cater for the unique requirements tailored to a country's own needs; provide foreign exchange savings as well as earnings; provide domestic employment as well as technological spin-offs to the civil sector; create national pride; help adopt imported systems to local needs; and give a chance to a nation to upgrade its equipment instead of importing newer ones and thus ensure operational readiness. Without this, no developing country can follow any alternatives but to go in for expensive imports and later, exorbitant interest rates, then spares and then more imports, an endless cycle ! Provided that the political goals can be well defined alongwith a fairly accurate sketching of the future operational environment, there is no reason for a country not to crystallise its indigenous philosophy. This will also open export potential. Countries like China and Brazil are financing all their modernisation programmes from the money earned in foreign markets.

The next requirement is to motivate and get the civil entrepreneur

interested. Here we have a tremendous communication gap of our own making. The civil entrepreneur is not seized of the peculiar and differing environments in which the armed forces function at high altitudes, jungle, desert, plains of on the sea. He must know the battlefield environment and as to what is expected from him in the next 10-20 years. The armed forces functioning in an isolated environment keep him at an arm's length. While the bureaucrat is not in a position to convey the 'feel' of a soldier's requirements and which in any case strictly lie in the professional's domain. And therefore, the Politician must rectify the existing imbroglio by atleast injecting openness, mutual dialogue, organising tours of front line areas, seminars which would further the cult of indigenisation.

THE TECHNOLOGICAL THRUST

Although technology cannot be taken as a panacea for all ills, yet the exploitation of current and emerging technologies is inescapable for the effectiveness of defence forces. What these technologies are is a matter for speculation. Three critical areas where this can be done is : Firstly, real time surveillance (the activity to observe, identify, interpret and disseminate information), target acquisition and intelligence, achieving precision so as to attack the most vulnerable portions of the enemy as well as to assess success. No military expert will ever be satisfied with the existing arrangements and therefore the enhancement of this ability must logically remain a priority one requirement. Secondly, a flawless and secure communication system to pass orders, receive reports, disseminate information and to enable commanders to constantly get in touch with each other, their superiors and subordinates. And lastly, improving the ability of artillery guns to engage targets in depth areas of enemy positions. Also, the use of MLRS (Multi Launch Rocket Systems) and automatic grenades to beat an enemy attack.

THE TOTAL FORCE CONCEPT

The concept visualises that all available agencies meant for the defence of a country, be it para-military, the territorials or the civil or Home Guards are thoroughly integrated in the regular forces. To take a simple example, India's Territorial Army (TA), for some unknown reasons, remains static at approximately 40,000 (25 inf bns, 14 railway regts, 3 oil bns, 3 ecological task forces). There are no armour, engineer, signal, EME or other service units. The TA has a very broad role and application. It is supposed to relieve the regular army from static duties and assist the civil administration. This TA can provide initial trained reserves to the defence forces to make up deficiencies in every field. Above all, it should have its own reserves. The concept of part time soldiering so as to enroll and tap the potential of as

many citizens as possible needs to be tried out seriously without inhibitions and with vigour. The concept is innovative and has all the potential. It can lead to reduction of substantial expenditure. There is no reason as to why India should not have its TA brigades and divisions and some of its best units could fight along with the regular army as they have done so successfully in Sri Lanka. In fact, for an Army of over a million, India would need atleast 6 lac personnel instead of just 40,000 - in the next 10 years.

SUPPORT FROM SPACE

This is an area awaiting exploitation and offers an alternative to a nuclear conflict. Satellites, space stations, orbiting robots are already there in great numbers to baffle our imagination. Third world countries would take time to develop their indigenous launch facilities and till that happens, they have no option but to launch satellites on foreign rockets on payment as is being done by European agencies and China. Satellites are already providing photographs, Elint (Electronic Intelligence), ocean surveillance and what not. So far as space stations are concerned, even America is yet to launch and assemble its space station in the late nineties in collaboration with Canada, France, Japan and other member countries of the ESA (European Space Agency). India has already demonstrated its capability to enter this field and would in due course do well to launch satellites to support operations on earth. So far as ASAT (Anti Satellite Weapons) are concerned neither we, nor any other Third World country is in a position to think about these weapons till the first quarter of the 21st century.

MOBILITY AND LOGISTICS

The need to continuously update and develop self reliant systems needs no stress. Logistics is the science of military supplies, quartering and transportation in battle. At present there is considerable dependence on road networks to bring spares, supplies and field works. Therefore heavy lift helicopters will play an important role. Although these are themselves dependent on logistics. The performance of a main body of troops in any war like situation is entirely dependent on the quality of logistic support given to it. In a nuclear scenario, the logistic systems become even more critical. The increasing accuracy in weapons, twenty four hour surveillance, prolonged exposure of units of battlefield conditions makes them much more vulnerable, thus putting heavy premium and giving less opportunity for sleep and rest, replenishment and repair. In turn, increasing pressure on reliability and maintenance. It is said that in the first world war, 65 tons were used (consumables) by the armies in the field in a day. By Second World War, the consumption rose to 675 tons and by the time Vietnam War took place, it was 1000 tons. By Oct. 1973, it was 2000 tons. High consumption rates

matched with low availability and the speed with which materials can be moved from rear to front will dictate results. Besides, continuous uncertainties about the use of chemical or nuclear ammunition being employed can force dispersal thus leading to all movement taking place in small groups - in turn leading to increased logistic demands.

CONCLUSION

In spite of rapid developments in military technology and scientific knowledge which have taken place in the recent years, we remain as far from the frontiers of knowledge as we have ever been. There is always something new on the horizon waiting to be discovered. It would therefore take an arrogant man indeed who professes to predict as to what technologies lie ahead and will guide the future course of events. Nevertheless, efforts to reach the new horizons and ideals need to be made.

To sum up, it is interesting to note that the current patterns of war have emerged against a background of four historical developments in this century : continuing technical revolution of the 20th century ; the on-going cold war between the Super Powers and the tendency of other countries of their satellites to stand or align behind one or the other opposing blocs; the decline of traditional imperialism along with the break down of overseas empires in Asia and Africa ; and limited success of the UNO in peace keeping operations. It appears and can be anticipated, that in future the threat of a nuclear war and chemical, biological and radiological weapons will continue to loom in the background. The developments in Space technology, besides offering an unlimited scope for supporting military and commercial ventures have opened up the possibilities of a conflict in the fourth dimension. Guerrilla wars, and threats of terrorism will also continue and dominate the Third World. As Space wars and threat of Star War weapons of the future take shape, these weapons to include laser, radar assisted 'stealth' aircraft and radiological weapons may also be used on earth. And while finalising conventional defence initiatives, these aspects must be taken into consideration.

Surprise - A Potent Weapon of War

MAG GEN M M WALIA

INTRODUCTION

Surprise as an effective means of defeating the enemy is as old a method as war itself. The long history of warfare reveals that surprise has been often the major contributing factor in the successful out-come of the battle.

Yet, in actual fact, military commanders generally tend to forget its over-riding significance both in planning as also in execution of a battle. There is, therefore, paramount need to occasionally re-emphasise the tremendous potentialities of this often neglected battle winning factor so that surprise and deception wherever possible are given due weightage in our operational plans.

PRE-REQUISITES FOR ACHIEVING SURPRISE

GOOD INTELLIGENCE

If the mode of achieving surprise is to strike at the weak spots of the enemy, it is too obvious to be stressed that one must get to know these. Reliable means of acquisition of Information about the enemy are, therefore, of paramount significance.

SECURITY OF INFORMATION

It axiomatically follows from the above that security of own plans must be fully ensured both by passive as well as active measures. Besides the usual precautions to guard the security of own plans, active deception measures are essential, particularly so when concealment of own plans is not practicable.

SOUND PLAN

Only through a sound plan, which is based on reliable logistic backup, can one hope to exploit the full benefits of surprise. The soundness of the plan lies in its ability to upset the strategic balance of the enemy's forces. Otherwise, however bold and brilliant a tactical or strategic manoeuvre may be, if it does not tend to imbalance the enemy, it cannot produce decisive results. Such an action of bravado may at best astonish the enemy but is unlikely to make him react to any such foolhardy adventure.

NOVELTY IN EXECUTION

Suitably organised, equipped and specially trained troops for the role envisaged are essential to support a well thought out plan. Coupled with this, novelty in execution of the plan will tend to produce the psychological shock to thus imbalance the enemy. The strategy of 'indirect approach' has inexhaustive application in this context.

AUDACIOUS ACTION

Audacity of a plan is likely to throw the enemy off balance more radically than anything else. The genius of audacity lies in the ability of a commander to forge a sound operational plan based on calculated risks, thorough preparatory effort including rehearsals, well orchestrated execution and confidence in own competence as well as ability of troops. This also requires inherent all-round flexibility and mobility to achieve speed. It is speed which to the maximum extent, paves the way for surprise as also successful execution of the follow up plan. Swiftens in decision, speed in concentration of the requisite force at the decisive point and then speedy execution of the operational plan are indispensable conditions in attainment of surprise.

SURPRISE AT STRATEGIC LEVEL

MEASURES AT POLITICAL/DIPLOMATIC LEVEL

At the level of grand strategy at the national level the most efficacious deception planning and its execution can be best done at the political and diplomatic level. Publicising of national policy on defence matters may be purely deception oriented.

DEPLOYMENT OF FORCES AT THE THEATRE LEVEL

Initial deployment of forces in different theatres can be easily utilised to effectively deceive the enemy. Force level deployed in particular theatre against an intentionally played up threat, may well be actually used in a different theatre.

DEVELOPMENT OF COMMUNICATIONS NETWORK

Long term plan of development of rail/road communications and air fields can also be utilised to achieve strategic surprise as some of these developmental activities may be primarily meant to contribute towards a

military deception plan. For example, any plans to develop existing road communication in an area which may tend to suggest development of a futuristic military threat may be purely aimed at deception.

JOINT OPERATION DECEPTION PLANS

Conduct of some large scale training exercises in conjunction with the Navy and Air Force may also be useful to confuse the enemy. For example, a well publicised amphibious training exercise or an exercise which incorporates a reasonable airborne manoeuvre may pay heavy dividend if it leads to enemy's reactions to modify his existing plans to counter this threat.

DELIBERATE 'LEAKS'

Among the active measures towards deception, it will be equally efficacious if one deliberately allows some own operational plans to be leaked to the enemy. The credibility of such actions must be ensured if the enemy is to be genuinely deceived. Besides the operational plans, false information about our military doctrines may also be passed to the enemy.

PASSIVE DECEPTION MEASURES

Together with the active measures to deceive the enemy, simple measures such as camouflage, concealment and use of decoys should be made use of to effect a deception plan. Ingenuous use of decoys can provide for deception about own strength, deployment and even intentions. Decoys have particularly enhanced potential in open terrain like the desert. The employment of sophisticated techniques to develop dummy equipment or use of decoys as satellites in space will be worth the effort.

ELECTRONICS FOR SURPRISE

Vast scope which the latest developments in the field of electronics and use of outer space offers in the field of surprise and deception in modern warfare requires to be fully exploited to be able to deceive one's adversaries at the strategic level.

CONCEPTUAL UPDATING

Our concepts and doctrines seem to have a tendency to become inflexible and stereotyped over the years. There is a need to have a continuous ongoing effort to evolve new concepts if surprise and deception are to be fully exploited as part of our operational plans in any future war.

CONCLUSION

There is no denying the fact that surprise and deception are key factors in planning and conduct of operations - both at tactical and strategic level. Rigid conceptual approach to evolution or execution of operational plans provides the greatest help to the adversary who intends to effect deception against his opponent. Dogmas and myths must never be allowed to have an upper hand on the thought process of commanders at any level. Thorough preparation and unbiased fore-thought are perhaps the best antidotes to surprise.

ADVERTISE
in the
JOURNAL
of the
United Service Institution
of
India

Advertisement Rates

Half Page	Rs. 1500	(\$ 110) per issue
Full Page	Rs. 2500	(\$ 180) per issue
Inner Cover Page	Rs. 3000	(\$ 215) per issue
Outer Back Cover Page	Rs. 3500	(\$ 250) per issue

Historical Events in the Growth of Navy and Naval Dockyard, Bombay

COMMODORE BK DATTAMAJUMDAR VSM IN

The 254 years old Naval Dockyard at Bombay (then called Govt Dockyard) has a very rich heritage of India's shipbuilding and maritime history. It was from the present site of this dockyard that in 1756 Lt Col Robert Clive (later on Lord Clive) as the Commander-in-Chief of the land forces of the East India Company alongwith Vice Admiral Charles Watson, the then Commander-in-Chief of the East Indies (Naval Forces) had embarked on the final expedition that destroyed the Angria fleet at GHERIA and VIJAYDURG. The same Watson helped Clive later on in Bengal. In 1757, in the battle of Plassey near Murshidabad, they defeated Shirajul Daula, the patriotic Nawab of Bengal, Bihar and Orissa, ushering in British rule in India.

The legendary, Lord Nelson served as a midshipman on board HMS "Seahorse" in Bombay. He visited the Dockyard here at least three times during 1775-76. "Seahorse" had surely docked in Upper Bombay Dock. The American National Anthem "The Star-Spangled Banner" was composed in 1814 on board HMS "Minden", built in Naval Dockyard, Bombay, in 1810.

The oldest ship afloat today anywhere in the world, HMS "Trincomalee" (later on renamed "FOUDROYANT") was also built in this Dockyard in 1817 with the finest Indian Teak wood.

The rapid growth of the Indian Navy is closely linked with the fast development of Naval Dockyard, Bombay, since 1947.

BACKGROUND

The Indian Navy is rated today as the seventh most powerful Navy of the World after her rapid growth during the last 41 years. Naval Dockyard, Bombay, has also been developed in similar pace to provide the much needed support to the modern and sophisticated ships, submarines and aircraft carriers of the Navy. It, however, had a very obscure start in 1735.

India-A Rich Maritime Nation : India's rich maritime heritage eclipsed under foreign rules. The shipbuilding industry of India is many centuries old, a fact little known today. Very many finest ships of Indian Teak built here created world records. The Government Dockyard at Bombay (now

known as Naval Dockyard) is 254 years old with a fantastic record of memorable events over the last two and half centuries. This premier dockyard has grown more and more over the years and is well equipped today to meet new challenges of the modern Indian Navy. India has also revived the shipbuilding industry in a big way after her independence to regain her rightful place in the maritime world.

Development of Bombay : Destiny has made Bombay, an obscure isolated island, described in 1628 as "No Good place To Winter-IN" by James Slade, Captain of the British ship "Blessings", to acquire a unique distinction over the years and even to contribute to the glory of the British and the Americans. The Portuguese were the first to arrive at Mahim (Near Bombay) in 1509. In 1534, the islands of Bombay were ceded to the king of Portugal by Sultan Bahadur of Gujarat. In 1626 the English and the Dutch invaded Bombay. Even at that time the island of Bombay was engaged in shipbuilding as the invaders "had noticed two new frigates under construction". In 1662, under the Treaty of Marriage between Charles II and the Infanta Catherine of Braganza, the king of Portugal presented "The island and harbour of Bombay" in full sovereignty as a marriage gift to the Crown of England.

First Dry Docks and Shipbuilding : The history of this Dockyard and its important role in the development and expansion of South Bombay and Colaba began when in 1663 the East India Company set about building of fortification and ship construction yard in Bombay. Lowjee Nusserwanjee Wadia is credited with the honour of being the first "Master Builder" of this Naval Dockyard. It was in 1735, two and a half centuries ago, that the present site of the Dockyard was occupied. The "Upper Bombay Dock" was completed in 1750 to become the first modern dry dock, not only in India but also in the East. Later on by 1765, Middle and Lower Bombay Docks were completed. Parsons, the traveller wrote in 1775, "Such a dry dock as perhaps is not to be seen in any part of Europe either for size or convenient situation". The Dry Dock at Lothal of Mahenjo Daro fame was the oldest but it had vanished with the collapse of that era. It is mentioned that ships were also built in many other places in India even in those early days e.g. Bengal, Surat, Malabar, Madras (Cholas), Visakhapatnam etc. to maintain sovereignty of many local kings as well as trade and Commerce in far flung countries i.e. Java, Arabia, Greece etc.

"Minden" Built in Naval Dockyard Gave the USA her National Anthem: In 1804, Bombay Government was asked to arrange for the construction of a 74 - Gun Warship. Accordingly it was decided in 1805 to build another drydock next to Upper Bombay Dock. This dock was completed in 1807 and named "Upper Duncan Dock" after the Honourable Jonathan Duncan,

the then Governor of Bombay. Jamsetjee Bomanjee earned much acclaim from Her Majesty's Government for building "Minden", (1681 Tons, displacement 2,982 tons, 74 - Guns) out of finest Indian Teak. There is a curious footnote in the US History about the gift of the American National Anthem from HMS "Minden". The keel of "Minden" was laid in the newly built Duncan Dock. On 1st Jan 1808, Mr Duncan performed the "Ceremonies of Driving the Silver Nail" that united the stem and keel of the ship. A Royal Salute was fired. She was completed by May 1810, and was launched on Tuesday, 19 Jun. The Honourable Governor Jonathan Duncan had performed the launching ceremony also with the breaking of the bottle. The ceremony was attended by thousands of spectators, many of whom came from nearby places, being attracted by the splendour of the ship. The "Minden" was the first ship of the line ever built for the Royal Navy under contract for the British Admiralty outside the United Kingdom. The total cost of construction was £ 57, 466 (Rs 4,61,673). Minden after commissioning sailed to England where she was evaluated against the best of British built ships e.g. "Russel". Minden was found to be much superior in every aspect and in recognition thereof, the British Government awarded momentoes to Jamsetjee Bomanjee the Master Builders. "No ship so highly finished or composed throughout of material so good, had been launched from any of His Majesty's dockyards or any yard in England during the last fifty years", writes the Captain of Minden. In 1814, HMS Minden took part in the American Second War of Independence. During the night battle in Baltimore harbour (She was shelling the town of Charleston, West Virginia), the red glare of the shells fired and the bombs bursting in the air created a memorable scene. Francis Scott Key, the American Composer and a prisoner on board, standing on the Minden's deck was highly impressed by it to write "The Star-Spangled Banner" to describe the occasion. It is well-known today that this composition later on became the National Anthem of the United States of America. Minden saw service all over the world and also in the battle of Algiers in 1816 where "She had fewer splinters than any other ship". The ship was sold away in Hongkong in 1861. It would have been wonderful if she could have been retained like her sister HMS Trincomalee which also has made world records todate.

Robert Clive and Admiral Watson Destroy Angria Fleet and Win Battle of Plassey: The Government Dockyard in Bombay not only built many Warships and merchant ships but also did repairs and fitting out of these ships right from 1717 when man-of-wars for the small expedition against Angria to capture fortress of Gheria was launched by the East India Company. In 1756, the Company finally crushed the Angrias and destroyed their fleet in Gheria and Vijaydurg. This expedition was led by Lt Col Robert Clive (later on Lord Clive) as the Commander-in-Chief of the land forces and

Vice Admiral Charles Watson as the Commander-in-Chief of the Naval forces (East Indies). The expedition, it appears, was embarked upon from the site of the present Naval Dockyard. The same Watson helped Robert Clive in Calcutta and in 1757 during the Battle of Plassey dethroned Shirajul Daula, the patriotic Young Nawab of Bengal, Bihar and Orissa. Since Watson refused to be a part in the Mirjafar affairs, history now records that his signature was forged either by Clive or at his order. Watson had died on 16 Aug, 1757 at Calcutta soon after the battle.

Lord Nelson in Naval Dockyard, Bombay: Lord Nelson as a Midshipman served on board HMS "Seahorse" deployed in the East for three years. During this period "Seahorse" spent lot of time in Bombay and had surely entered the Bombay Docks, then the only dry dock in the East for repairs/cleaning. Nelson visited Bombay at least three times during his service in India, twice in 1775 and once in 1776. Unfortunately no details are recorded about this period of his life in any published works.

Oldest Ship Afloat Today in the World: Between 1735 and 1932, spanning a period of nearly 200 years, 249 ships of various sizes and types were built here. The oldest ship afloat today in the world, HMS Trincomalee, (later on renamed as FOUUDROYANT, a frigate fitted with 46 guns, 1065 tons) was built in 1817 in this dockyard using finest quality teak wood. She was Cadet Training ship in the Royal Navy at Portsmouth till recently. A video film on "FOUNDROYANT" made in the U.K. is presently available with Mazagon Docks, Bombay. The ship is likely to be auctioned in Portsmouth but a "Save FOUUDROYANT" Committee with Prince Charles as the President is making all efforts to retain her or even to bring her back to India as a moment of rich maritime heritage of this Dockyard and India. However, so far no tangible results have emerged.

Manufacture of First Steam Ship: The Industrial Revolution ushered in changes in ship construction also. Slowly the wooden hull yielded to iron and later on to steel and the sail to steam power. Naval Dockyard had quickly adopted these changes. The present heavy machine ship alongside Duncan Dock was built as the Steam Factory. In 1830, the first steamship "High Lindsay" was built here and in 1840, the first iron hull ship, and in 1880 the steel hull came out from this dockyard.

THE EARLY JAMES WATT GOVERNOR

One of the first ever manufactured "James Watt governor" can still be seen in this Naval Dockyard, now in disuse. This governor occupying a whole big room (present day design is less than half a metre maximum)

was used to control the early Lanchashire Boiler specially brought from the U.K. essentially required for war efforts then and installed near the old Wet Basin next to old Battery Shop. An exactly similar James Watt Governor (vintage value) can be seen in the British Science Museum, London.

CONCLUSION

These are some of the important and memorable events of this Dockyard which shaped the history of India and the world.

JOIN

UNITED SERVICE INSTITUTION OF INDIA

Founded 1870

For the furtherance of
INTEREST AND KNOWLEDGE IN THE ART
SCIENCE AND LITERATURE OF THE
DEFENCE SERVICES

For particulars, write to

Director U.S.I.
Kashmir House
Rajaji Marg
New Delhi - 110011

Socialism in Theory and Practice *

LT GEN ML THAPAN PVSM (RETD)

The Oxford Dictionary defines Socialism as 'a political and economic theory of social organisation which advocates State ownership and control of the means of production, distribution and exchange'. As a theory, it has been around for about two hundred years, motivated in part, by fundamental human aspirations and sentiments; but otherwise, by less noble motivations, such as envy of those richer than oneself, regardless of whether their wealth has been acquired by their own exertions, or not. Brain Crozier's purpose in this book is to summarise what socialists have offered over these two centuries, and what has actually been delivered in the name of socialism. It begins with the philosophers, or dreamers - Robert Owen, Saint Simon, Francois Fourier, Etienne Cabet, Louis Blanqui, Pierre Proudhon and Karl Marx - and continues with the politicians, or doers - Lenin, Mussolini, Hitler, Franco and other luminaries of the Third World. From his historical survey and subsequent analysis of the performance of the doers, there emerges a devastating indictment of the theory of socialism. He sets forth, briefly, the following lists of promises or predictions of the socialists option:

- (1) Common ownership would lead to greatly increased output.
- (2) There would be a fairer, more even distribution of wealth ... The poor would gradually be brought up to the level of the rich.
- (3) Class conflicts would be eliminated.....
- (4) All would participate equally in the political process...
- (5) No more economic fluctuations: the 'cyclical crises' of capitalism would end.
- (6) Racial and cultural distinctions would be ironed out, as well as social classes.
- (7) Wars would end when the world consisted of socialist States, because the instabilities of capitalism and conflicting interests between rival ruling classes would have vanished."

He then goes on to examine how far these have been fulfilled by their proponents, and disciples, in different countries who followed the socialist

* *Socialism : Dream and Reality* by Brain Crozier, Published by The Sherwood Press 88 Tylney Road, London E 7 DLY 1987, pages 145 price £ 9.95

path. His examples are drawn from many countries and from different periods; his approach is nonpartisan, and only the "committed" reader can disagree with his contention that the failure of socialism is universal, varying only in degree. From his analysis, in the hard reality, as distinct from the rosy dream, three Universal Rules of socialism emerge. These are best enunciated in his own words:

I "The first Universal Rule of socialism is that it fails wherever it is tried. It does not matter if it calls itself Burmese Socialism or African, whether the experiment takes place in Sweden, or Tanzania or Cuba, it simply does not work.

II The second Universal Rule is that the degree of failure is proportionate with the degree of socialism: the more there is of it, the worse the failure - allowing for other factors such as the stage of development reached before the experiment began and the aptitude for economic development of the nations and peoples concerned in the light of history, civilisation, culture, climate and any other relevant factor.

III Socialism is incompatible with freedom. Here again, the degree to which socialism has been adopted or imposed is crucial ... look at the plight of the people in the most extreme socialist regimes in the world, which are probably those of the Chinese Peoples' Republic, North Korea and Vietnam. In all three, individual freedom has been virtually extinguished."

Brain Crozier's study of the experiment of socialism in different countries is extensive. He does not draw too great a difference between communist and socialist regimes. The question is mainly one of degree. The promise of communism, seen as the coming of abundance for all, is like a mirage; the closer you get to it, the farther away it seems. Socialism follows the same pattern. It takes a totalitarian State to impose full socialism; this reinforces his contention that socialism extinguishes freedom. The example of the Soviet Union is before us. It has taken 70 years for a pragmatist such as Mikhail Gorbachev to emerge and to attempt a reversal of the de-humanising process. The decline of the British economy in the 1960s, after it had been injected with a dose of socialism, was marked. Industries which had been nationalised were performing badly and costing more and more public money. Labour was losing the work habit, both because welfare cushioned it against unemployment and because incentives were inadequate. Additional effort was meaningless since increased earning would be absorbed in taxes. The author has included in his survey the effects of socialism in India and what is called the Third World; they are too close to us to require

elaboration. We have eaten the pudding and need no further proof.

Georges Albertini is credited with having said that "Socialism is communism in homeopathic doses". The proliferation of bureaucracies, the interference of the state in industry and commerce weigh down national budgets, to the point of becoming unbearable. Failure to produce results gives rise to more and more curbs on individual freedom. Brain Crozier considers it imperative to push back the frontiers of the State to three basic areas, which alone justify its existence:-

- (a) Internal Security; the protection of its citizens against crime, subversion and the maintenance of public order;
- (b) Defence of the State against its external enemies;
- (c) The maintenance of the value of money.

This is a fascinating, thought provoking book and a timely warning to those wishing to take the Fabian path.

Gorbachev's Perestroika - New Thinking and India*

BRIG D BANERJEE

There emerges only rarely a book that has the potential to change the world. General Secretary of the Soviet Union and President Mikhail Gorbachev's tract, "Perestroika - New Thinking for our Country and the World", very clearly belongs in this category. The Book deals with two separate but interrelated aspects. First is Perestroika, meaning restructuring, which deals essentially with matters pertaining to the rejuvenation of the Soviet Union without altering its basic socialist character. This is a necessary pre-condition to the second element, that is his "New Thinking"; which deals with fundamental questions of world security and provides a framework for reordering international relationships.

Both these issues are relevant to India. Continuous dialogue and interaction have made us partners in some of these developments and we have a clearer perspective of their significance. A Review of the Book then has to address these substantive issues rather than make only a few innocuous observations.

Even though Perestroika stands for restructuring, Gorbachev has endowed it with both a wider and deeper meaning. He prefers to equate this with 'revolution', because the changes he attempts to introduce are in their nature revolutionary. He recalls that successful revolutions are not singular events, but are a continuing process. The Socialist Revolution of October 1917, then has to be carried forward through further radical changes depending upon the historic needs of the society, the stage of its evolution and the changing environment.

What have been the achievements of Perestroika so far ? There are many positive developments. Glasnost has been given full rein. There is much greater openness and questioning that encompasses all aspects of Soviet life. Democratization has been introduced though in a form which retains effective overall Party control. Attempts are being made to make production units more autonomous. Experiments are taking place to liberate agricultural activities from State controls and hand them over to individual farmers and small cooperatives.

* *Perestroika : New Thinking for our Country and the World* by Mikhail Gorbachev. Pub. by Harper & Row, 18E, 53rd Street, NY 1022 (USA); 1987, Pages 254, Price not mentioned.

Does this have any relevance to India ? A view can be taken that the Indian Scene is radically different, its democracy is deep rooted and the segment of industry that is in private hands is vibrant. Yet it is also true that many infirmities similar to the Soviet union also prevail in India. The economy is still sluggish and not comparable to world standards either in technology or production. The bureaucracy is all pervasive, unresponsive and stifling. Perhaps there are some aspects that we in India may do well to ponder over seriously. Some of these may well be as follows :

- * An electoral reform that may be relevant is to introduce the 50% rule. By this a contestant who does not secure atleast 50% of the votes polled is not elected inspite of his being the leading candidate.
- * Another is to introduce more democracy in the decision making process and take it to the grassroot level. This is best achieved through decentralization. It will also require a smaller bureaucracy and one that is more responsive and accountable to the people.
- * Next is to introduce more 'glasnost'. Perhaps there is enough of this already and in some opinion a bit too much. Yet it is not only freedom of expression that signifies openness, but access to information. Our systems need to be more transparent where information of all types are available readily and easily.
- * An effective industrial policy must allow the old and inefficient to die, so that sunrise industries can be set up in their place. How to do this without causing social disruption and unacceptable individual distress, is something that needs careful consideration and courage and determined implementation.

There are other aspects of New Thinking that have lessons for India. Major war even in South Asia is unlikely in the future, because this region too is nuclearised, with all its attendant consequences. But lower levels of conflict, such as border wars, external interference in internal matters, drug and smuggling menace, threats to the common ecology, and trade wars will perhaps be of increasing relevance. This will call for new approaches to security and inter-state relations even in our environment. Steps to reduce the possibility of such conflicts may require different options. Border conflicts can be resolved through bilateral agreements, greater confidence building measures, demilitarisation of selected areas and perhaps mutual reduction of forces. Nuclear threat is one area which can be addressed through the elimination of existing arsenals and more 'glasnost' in verification measures. Other areas too can best be tackled through greater 'people to people' diplomacy, a regional approach to security and better cooperation.

The economic dimension of the problem must also be given due weightage. Just as Gorbachev has accepted that only economic rejuvenation will allow the Soviet system to compete internationally ; it is only through quicker economic progress that India can overcome its many problems and be counted in the world. This too calls for a regional and cooperative approach.

A Book can be but a source of ideas. It takes more than just that to change the world. Yet it can initiate a process and make people think. It is after all people who ultimately decide the destiny of this globe and it is to them that the Book is addressed. The questions that he poses to them are two. Do we want a world that remains divided into groups big and small, and in a state of perpetual confrontation ? Or can we move in the direction of a cooperative and conflict free world ? This Book shows the way to a more secure future for mankind.

Gulf Politics*

COL R RAMARAO, AVSM (RETD)

"Cross currents in the Gulf" explores three important issues concerning Gulf states, namely, "Gulf in international Affairs" (Part I), "Significant Issues" namely the "Iran-Iraq War", "Gulf Oil Powers in the 1980's" and "Socio-Political Change in the Gulf: A climate for Terrorism?" (Part II); and "Gulf States in Transition" (Part III) wherein problems pertaining to Oman, Saudi Arabia and its neighbours and United Arab Emirates are discussed.

The main foreign policy concern of Arab Gulf states till recently was the Iran-Iraq war, as noted by Hermann Frederick Eilts. An Iraqi victory would frighten Kuwait, whose ruler and people fear, not without justification, that Iraq would subject it to severe pressure and even perhaps try to annex it. An Iranian victory, on the other hand, would frighten almost all Gulf states as it may give a new dimension to the Shia-Sunni divide. Saudi Arabia is the dominant state in the Arab Peninsula and is gradually building up its military strength. However, it considers that it needs external assistance to safeguard its economic and political interests and hence maintain close and cordial relations with the USA, which for its part has a stake in the stability of the principal Islamic country. Gulf states, however, do not share USA's view that they need to be protected from possible intrusions by the Soviet Union. Kuwait has cordial relations with the Soviets, while Saudi Arabia has made cautious moves towards establishing diplomatic relations with them. This is a wise step and will at the very least provide opportunities for representatives of the two countries to meet each other, exchange views, and in course of time evolve normal relation between the two independent countries.

John Duke Anthony in his essay on "The Gulf Cooperation Council: A New Frame Work for Policy Coordination", recounts the history of the GCC, its internal problems and its successful efforts in forging fruitful economic and political links among Gulf States. Gulf leaders have exhibited a rare capacity for profiting from past failures. They have established a Supreme Council consisting of Heads of member States. Presidency of the

* CROSS CURRENTS IN THE GULF: Arab, Regional and Global Interests Edited by H. Richard Sindelar III and J.E. Peterson Published by Routledge, a division of Routledge. Chapman and Hall, 11, New Fetter Lane, London EC4P 4EE, 1988, Pages 239. Price-not given.

council rotates annually among Heads of member states. The GCC has a Ministerial Council, consisting of foreign ministers of member states, which implements the policies laid down by the Supreme Council. The Council's Secretary General is Adhullah Bishara, a former Kuwaiti diplomat who was previously Kuwait's Representative at the United Nations. None can find fault with the organisational framework of GCC.

The GCC is a very influential organisation, given the oil wealth of its member countries and their strategic and economic importance for the world's leading powers. Over the past two decades GCC has achieved much by way integrating the member states and forging closer economic and industrial links amongst them.

Roger F Pajak, National Security Adviser for Soviet and Middle East affairs in the office of the Secretary of the Treasury discusses "Soviet Designs and Dilemmas in the Gulf Region". This is the familiar theme of Soviets endeavouring to gain access to the Gulf region. He concedes that the Soviets do not need Gulf oil but they seek to control the source of oil in order to pressurise the West. Moscow's objectives could be, according to Pajak, to--

- (1) reduce West's influence in the Gulf;
- (2) expand Soviet influence;
- (3) obtain some degree of access to the oil of the region; and
- (4) ensure its own security interest .

Prima facie one cannot take objection to these objectives. If USA can come from the other hemisphere to safeguard its interests in the Persian Gulf region, the Soviets having to exist next door can well have legitimate interests in preserving peace in the Gulf area, their soft under-belly.

Wayne E White, formerly of the Department of State's Bureau of intelligence and Research has analysed the challenges posed by the Iran-Iraq war to Gulf States. Gulf States, understandably, viewed Iraq's policies with mixed feelings. All was well from their point of view so long as Iraq followed a moderate policy. While Gulf states welcomed Iraq's disapproval of the presence of foreign troops on Arab soil, they were uneasy regarding Iraq's increasing military and political clout. However, Iraq's long war with Iran began to eat into its vitals and reduced its strength. Its currency reserve of over \$30 bn as of 1980 was soon spent and Iraq now may owe more than \$ 50 bn to Saudi Arabia and other Arab states. This has sobered Iraq which has resumed diplomatic relations with the USA.

The only beneficiaries from the war have been the Americans, British, Chinese and their armament industries. Wayne Wright does not deal with this aspect of the Gulf War.

'Gulf Oil Policies in the 1980's by Joseph C Story provides a useful study of how oil prices changed during the Seventies and eighties in response to the changing regional political situation and the policies and resulting actions of USA and other industrialised nations. Readers will find the statistical data pertaining to production quotas, oil shipments and USA's oil imports, included in Story's essay, quite useful.

"Socio-political change in the Gulf: A Climate for Terrorism" by Professor Rouhollah K. Ramazani is a thought provoking study on social conditions, religious differences and ideologies of people in different parts of the Gulf. Historical legacies cannot be wished away, nor the differing not to say conflicting political and religious ideologies of minority groups in Sunni Arab countries.

Part III of the Volume, in many respects, the most important part, takes a peep into the future, projecting how conditions may be in Gulf countries early in the next century. Saudi Arabia, undoubtedly will remain the dominant country, politically and economically, given its size, its oil wealth and its historical role as the guardian of the legacies of the Prophet and of Islamic Shrines.

Oman at the Gulf entrance has its problems. Its ruler, Sultan Qaboos bin Said has ushered in a new era for his country and Oman can look forward to a bright future under his guidance. The United Arab Emirates have learnt the wisdom of cooperation with each other and may be expected to continue on this course to the advantage of all. Bahrain is prosperous and despite a sizeable Shia population is stable and cosmopolitan in its outlook. All Gulf states including the staunchly pro western Saudi Arabia recognise that the best way to preserve peace in the region is to gradually normalise relations with the Soviets, while maintaining cordial relations with the West. That peace is too precious to be frittered away in needless ideological controversies, seems to be the lesson that Gulf states have drawn from the events of the past two decades.

This is a lesson worth noting by all and particularly by the leaders in developing countries.

Islamic Revolution in Iran*

BRIG CHANDRA B KHANDURI

The year 1979, among other things, saw two important developments in the Middle East. The ouster of the powerful Shah dynasty from Persia; and with it, the rise of the Islamic fundamentalism perpetuated by the Mullahs under Ayatollah Rohilla Khomeini, the purge of those who were once the rock foundation of the Persian Empire and the Pan-American influence in the Gulf. Along with it, indeed, began the change to a new chaos from an old order.

Closer home to India and Pakistan, the second important development took place in the form of the Russian intervention in Afghanistan by end of the year. With these two events, the epicenter of international events shifted to these regions : the Gulf and Afghanistan.

It is interesting to watch the effect of these two phenomenal events on the Super-Power strategy. In Iran while the internal rivalry and confusion prevailed, it reached its climax with the occupation in early November of the American Embassy in Tehran and a year long (444 days) seizure of the hostages. The anti-American feelings continued to run high, reaching its climaxes in spurts.

The flight of some three million refugees from Afghanistan into Iran and Pakistan as a result of Soviet Military intervention to support the Barbak Karmal's Government in Kabul, the American, Chinese and the Middle Eastern countries' support to the guerrilla groups in Afghanistan and leading upto recent events involving a phased pullout of the Soviet forces from there has been but another consequential development of this epicentral activity. The other and equally - and perhaps more important - activity was the invasion by Saddam Hussein's army of the Iranian territory in September 1980, and the beginning of the longest wars of the 20th Century - the so called Gulf war, which has just ended.

Bakhash's book does deal with the historical evolution, the strategic developments and the fallout of the Islamic revolution. If a revolution - like all revolutions of history including the French, Communist in Russia and China or even the Industrial Revolution - is aimed at changing the

**The Reign of the Ayatollahs : Iran and the Islamic Revolution* by Shaul Bakhash, Published by I.B. Tauris and Co. Ltd., 3 Henrietta Street, Covent Garden, London, WC2E 8PW, England (1985)
Pages 282 Price £ 13.95.

whole structure of a society, the Iranian revolution of the Mullahs has so far been only a partial success. The Clerics have indeed, to a large extent, reduced the number of their opponents, but they have at the same time, not been able to change the root of a rich Persian culture based on heritage of Aryan nobility and secularism. Perhaps the Gulf war came as an impediment to the Mullah's design of changing the order by murderous purges. Perhaps the indirect international pressures have reduced the chances of its success. But the conclusion is that the Mullah's intended dreams of revolution have so far remained unfulfilled.

A final word about the book. It is a good history book of Mullah's return to power in Iran ; it, however, does not see the other 'side of the hill.' There is little that seems to have been authoritatively drawn upon by the author from those in authority in Iran. What one expected equally was an analysis of events with futuristic portents, and how the epicentre having moved to this region, the future developments could emerge.

BOOK REVIEWS

An Improvised War : The Ethiopian Campaign 1940-1941

By Michael Glover

*Published by Leo Cooper, 10 Upper Grosvenor Street, London W1X 9 PA
(UK) 1987, Pages 202, Price £ 18.00*

Michael Glover has written a number of books and he specialises in Military History. His book 'An improvised War' is a well documented and well researched work which is a welcome addition to the material already available on the conduct of operations during the early stages of African Campaign.

The book mainly deals with Ethiopian Campaign 1940-41. The author starts the book by analysing the political background and the attitudes of the major colonial powers, which affected the subsequent conduct of operations in this very primitive, undeveloped, rugged semi-desert area.

By 1930's the colonial powers had, between themselves, gobbled up almost the entire Continent of Africa, Ethiopia being an exception. Ethiopia because of its lack of any visible exploitable resources was not attractive enough prize to bother about, on the contrary administering its feuding populace was likely to be an embarrassment, therefore Ethiopia had been left unmolested.

The author poses the question of validity of undertaking this campaign. However, the justification he himself advances is very cogent - Wavell's constraints to keep the Red Sea Shipping lane open; clear all hostile stretches along Red Sea, so that American shipping would be willing to negotiate it; an alternative to Alexandria port in the event of its capture by Axis, possibly the port of Massawa; and the political advantage of liberating Ethiopia.

The author closes the saga of campaign, by nominating Indian battalions as 'Stars of the Campaign' amongst its multi racial participants.

-- Maj. Gen. Surinder Nath AVSM, VSM (Retd)

Israel's Global Reach: Arms Sales as Diplomacy

by Aaron S. Klieman

*Pub. by Pergamon - Brassey's International Defense Publishers, 8000
West Park Drive, Fourth Floor, Mclean VA 22102 - 3101 (USA) 1985,
Pages 241, Price \$ 27.00*

World wide arms trade was estimated as \$ 35 billion during 1982. Four countries, USA (34%), USSR (25%), France and U.K. dominate this

market. Third world arms' exporters accounted for 2.4% of this trade in 1978-81; this was shared by Brazil (45.6%), Israel (21.1%), Singapore, South Korea, Taiwan and others.

During 1970s and 80s, the Less Developed Countries (LDCs) accounted for 80% of the value of the Global Arms Imports ; the Middle East (ME) countries consuming the lion's share, followed by Latin American countries (\$ 2 billion). USSR is the largest supplier of arms to the ME (to Iraq, Syria, South Yemen, Algeria, Libya); USA taking the second place, (to Israel, Egypt, Sudan, Jordan, Saudi Arabia, Morocco, Oman, Tunisia and Lebanon). Lately, France has succeeded in making significant inroads in this area, bagging a bilateral agreement with Saudi Arabia worth \$ 4.1 billion and supplying arms valued at 5 billion to Iraq during its war with Iran.

International arms sales have undergone a Sea-change since 1945, when the LDCs were content to receive cheaper outdated and obsolescent weapons. Currently, the ME countries' demand is for highly sophisticated weapon systems. During 1981, 94% of the registered arms transfer were for new weapon systems, 4% for refurbished and only 2% for second-hand weapons.

Israel's arms sales touched \$ 1 billion during 1980-81, constituting about 25% of its total industrial exports. Latin American countries bought about 50% of Israel's arms exports-El-Salvador being the largest single consumer in central America and Argentina in South America. South Africa is the leading importer of Israeli arms in Africa.

There is however, a growing world demand (including from USA and West European countries) for electronics, optical, accoustic and other sensors, computers, warning systems, precision guided weapons, missiles with homing devices, electronic warfare devices, command and control systems, scout and mini RPV reconnaissance equipment etc. In December, 1984, NATO Defence Ministers agreed on a 6 year \$ 7.85 billion package of basic improvements in conventional defence systems. Supply of defence software, therefore, presents a major 'window' of opportunity for Israel. In this field too, USA is the key to Israel's defence sales prospects.

-- Brig. S P Datta AVSM (Retd.)

Security in the Middle East : Regional Change and Great Power Strategies

By Samuel F Wells, Jr & Mark Bruzonsky

Pub. by Westview Press, 13 The Brunswick Centre, London WC1F (UK), 1987, Pages 366. Price £ 41.50.

This volume published in 1987, is yet another study of Middle East affairs with particular reference to the security of the United States of

America and its Western Allies. It has been produced by the International Security Studies Program of the Woodrow Wilson International Centre for scholars.

Part one of the book consists of case studies of the key countries, Syria, Lebanon, Israel, Egypt, Saudi Arabia, Iraq and Iran. Part two is devoted to "The Palestine Quagmire : Searching for a way out" and Part three "The Great Powers, Oil and the Middle East."

The dominant theme is the emergence of nationalism in the area and how religion, even if it is necessary to preach religious fundamentalism, is manipulated to achieve this end of nationalism and of course the conflicts of the various tribes and sects.

US interest in the Middle East started in World War II when it organised supplies from Iran to its war time ally Russia. After the War, Russia hesitated to remove its troops from the Northern tier, Iran, Turkey and Greece. Thus this area became an early battle ground of the cold war. Truman took a stand against Stalin in 1946 resulting in the Soviet troop's withdrawal and so Truman's doctrine of containment as applied to Greece and Turkey became the operating axiom of US foreign policy everywhere.

The authors caution both the US and the USSR against the deadly consequences of supplying arms to their volatile clients.

There is a discussion on India and Pakistan (p 335-336). The USA is warned about the consequences of aiding Pakistan by supplying arms and the dangers of extending support to General Zia-ul-Haq because of his postponing the return to democratic rule. Implied is the possibility of a popular uprising against the regime and the US. In contrast the Soviet relationship with India is considered more stable and durable. The promotion of Indo-Pakistan friendship and understanding to form a solid bloc as an ally of the US is recommended though it is not easy considering the depth of friendship and influences which the USSR has established with India.

-- Maj Gen R.L. Chopra PVSM (Retd)

American Security, Dilemmas for A Modern Democracy

By Bruce D. Berkowitz

Published by Yale University Press, 13, Bedford Square, London, WC 13 3JF, 1986, Pages 282, Price \$ 25.00

The author who, apparently, has held positions of responsibility in the department of defence as well as in academics, justifies yet another book on American Security, the present one, on the plea that most of those written thus far have projected their own partisan view points which quite often

contradict each other whereas his attempt has been to present a balanced view which is required at the present juncture when the USA's security plans for the nineties are being evolved.

In the author's perception certain security planning is plagued by three unavoidable demons - political, economic and technological and as such even if every "corrupt politician, inept and greedy contractor" were to be eliminated, problems would still remain.

Issues of strategic deterrence, gradual reduction in the effectiveness of counter force, arms control and increasing problems in monitoring nuclear proliferation, the problems of confrontation in Europe, the importance of the Persian Gulf to USA and the difficulty of extracting true intelligence from amidst differently biased reports have been simply and clearly analysed.

The author presents some interesting views. On the subject of budget he feels that no durable change can be easily affected because of bureaucratic inertia. Nuclear proliferation, he feels, may not be all that bad provided it is in the right direction. He seems to suggest that Pakistan ought to be aided in its guilt to acquire a nuclear capability.

This is an interesting book that is well worth reading.

-- Col. Raj Chatterji

The Battle Honours of the British and Indian Armies 1662-1982

By HCB Cook

*Pub. by Leo Cooper, 190 Shaftesbury Avenue, London WC2H, 8JL (1987)
Pages 552, Price \$ 75.00*

The book gives a fascinating account of the Battle Honours bestowed on the British Army. It also includes the Battle Honours awarded to the Indian Army regiments who performed yeoman service for the British Raj during the nineteenth and twentieth centuries. The author has brought out the gradual development and the principles governing the selection of Battle Honours and their recipients.

The author has brought out that the British were late in adopting the system of Battle Honours compared with some of the European Armies. The system seems to have grown in a somewhat haphazard manner but two rules have been generally applicable. The first was that no Battle Honour should be given for a defeat nor for an unsuccessful war. The second condition was that the HQ and at least half the regiment concerned must have been present and exposed to musketry fire before becoming eligible for a Battle Honour.

In the case of the Indian Army, the East India Company adopted the system of Battle Honours early and the first Battle Honour 'Assaye' was bestowed on the Native battalions during 1803, a month after the battle even though the British regiment got the Honour later. It is a matter of interest to us in the Indian Army that Battle Honours were awarded to the Mountain Batteries and Sappers and Miners till the end of World War I.

The book under review is an excellent reference book which will be of great assistance to historians and those dealing with Battle Honours. It has very useful annexures and appendices and should be an asset to our regimental libraries especially as it covers the Battle Honours of the Indian Army till the beginning of World War II. The author has, in addition, given a useful appendix showing the nomenclature of our units at different stages of reorganisation of the Indian Army.

-- Maj Gen Lachhman Singh Lehl PVSM, Vr. C.

The New Maginot Line

By Jon Connell

Published by Martin Secker & Warburg Limited, 54 Poland Street, London W1V 3 DF, 1986 Pages 308, Price £ 12.95

This book on Military Policy covers the subject in its entire spectrum as applicable to NATO strategists.

Jon Connell is no greenhorn as far as subjects connected with the military, this being his fifth publication. He, however, has assumed the role of a maverick in this book taking up cudgels against the military establishment of the United States. His indepth research reveals with incisive clarity the ineptitude of people connected with the planning, equipping and waging of war. He further implies that the foundation of the American War machine is laid on exploiting the Fear psychosis of the tax payer. The potential enemy's numerically superior conventional armoury is being blown out of proportion to gain favourable and generous defense budgets to equip the US forces with high tech gadgetry. The bottom line being that quantitative disadvantage can be offset by technology.

The author in his remarkably lucid and easy style convincingly impresses the reader with his inference that High tech weaponry is neither reliable nor provides a safe haven that an over trusting public would want. This in his parlance is the New Maginot Line - an illusive defense mirage.

He has also dealt with the Star Wars (Strategic Defence Initiative)

programme and has in his own way presented the achievable aspects, as would appeal to the educated reader. An insight into his style is "the difference between offense and defense is the difference between building a machine gun and building a computer controlled defence system that would protect soldiers by locating, tracking and destroying enemy machine gun bullets in the chaos of an all out battle".

A thoroughly engrossing book specifically recommended for readers connected with planning and equipping a military machine.

-- Col S Gulati

Combat Fleets of the World 1986/87

By Jean Labayle Couhat. English Language Edition

prepared by A.D. Baker III

Published by United States Naval Institute Annapolis, Maryland 21402 USA

780 pp Price not indicated

The United States Naval Institute, Annapolis, Maryland, USA which has to its credit publishing a number of books of naval interest is to be congratulated for bringing out another useful book the sixth edition of *Combat Fleets of the World 1986/87*.

This book has wealth of information on the characteristics, capabilities and composition of the navies of the world and their para military forces like the Coast Guard, Maritime Safety Agencies etc. It also gives details of the strength of personnel of the navies and the tonnage of Merchant Marine.

The technical details of armament, engines, systems etc. have been well covered. There is also complete information on the auxiliaries and support ships. The display of about 3,000 photographs - some in large size particularly of the US and USSR navies is excellent.

This book would have been complete if broad details of the organisation of the navies along with the names of the Chiefs of the Naval Staff and the Commander-in-Chiefs of the various commands and their locations were also included.

There are a few minor mistakes. Firstly, the Godavari Class Frigates of the Indian Navy (Page 239) have two Sea King Helicopters and not one as mentioned in the book. Secondly, PNS Ghazi, the photograph of which appears on page 371 is no more. This submarine was sunk by the Indian Navy Forces in December 1971 during Indo Pakistan conflict.

In regard to the entry about the Indian Navy's plans to acquire 3 Kresta Class II Cruisers, I wonder what is the author's source for this information.

The readers will find the indepth analysis of the four major navies of the world - USA, USSR, UK and France giving the details of their ships, weapons and systems and the future construction programmes both educative and interesting. How right is the author that there are two events which will effect the naval strategy and tactics to some degree on the generalised use of outer space by surveillance and telecommunications satellites, and the so called cruise missile.

A good reference book which should find a place in the libraries both afloat and ashore.

-- Captain RP Khanna AVSM
Indian Navy (Retd)

Quit India Movement : British Secret Documents

Chief Editor Dr PN Chopra

*Published by Interprint, 16-A, Naraina II New Delhi - 28, 1986, Pages 424,
Price Rs. 195.00*

A collection of documents and extracts from secret files on the Quit India Movement would excite the many who lived through those stirring times and would be eager to know the secrets of what the then government evaluated, planned and thought of this "Landmark in India's struggle for freedom". Historians of the future would look for and judge by an accurate and well balanced record, projecting the real situation and picture of those times.

Dr Chopra, himself a historian of repute, has not achieved this. No doubt every document in this book is genuinely extracted from the secret files made available to him, but the contents of many are suspect and are not confirmed as a true report of situations as they existed. Many colourful and emotional documents have originated from Nationalist leaders, and are included here because they fell into official hands and were filed - these are not truly "British", and though basically factual, they have our characteristic overstatement which contrasts against the starkly official records of the police, administration and intelligence authorities. Together these present a picture where the leaders of the movement indicate the achievement of India-wide chaos, while the officials show great concern but nevertheless firm containment of this spontaneous movement, causing disruption in some areas only and not vitally affecting the war effort against the Axis powers.

Dr. Chopra's book contains a racy story, which still makes your blood boil, be it nothing but the truth but not the whole truth.

-- "Tindi"

Hindu Horseman

by Lt Col Denzil Holder

*Published by Picton Publishing (Chippenham) Ltd, Chippenham, Wilts, 1986,
Pages 217, Price £ 12.95.*

The Hindu Horsemen is a book about the life and times of a young British Officer in the Skinners Horse. There is little about military science or, mercifully, about the period politics. The book is about people, places and playing Polo between the Two great Wars.

The routine horse parade, manoeuvres, the station club with its Snake pit, the Officers' mess, the visiting Brass are all there, recalled with wit and warmth. Because of the insularity of the Indian cantonment, the brief winter outings or the long leaves into the higher hills provided relief as also the occasional insights into the Land and its myths: Lord Krishna went past one particular night and blessed the houses wherever he saw a light or the Kashmir guide checking out a camp for snakes after first looking up at Haramukh does not allow snakes in any place its top is seen from.

There too is the Language Munshi: Try a Hindi translation for: The animals went in, two by two, the Elephant and the Kangaroo: a wager may yet be lost for the ubiquitous kerosene oil finding its way into a choice entree at the mess table. Here too are the Polo-playing giants: international and Indian. The scene and the flavour of the game is described with rare economy with sympathy even when the Polo gladiators provided (the turf club of India) its Roman Holiday. Who would imagine that an erstwhile Poloplaying prince had devised the finest (free from pollution and all) exercise pit and equipment in the form of a heap of sand and a shovel. The sand was shovelled from one end of a palace room to the other end daily and guests could be invited to exercise !

Outside India, during "home" leave and polo-trips, are described priceless vignettes of life amidst the great Barons and nobles of a pre war Europe and the Cinema and Car Moghuls of America.

The Hindu Horsemen is an easy to read, easy to forget memorabilia, that many a subaltern and particularly those of the Skinners Horse could pack away.

-- Col Balwant S Sandhu

The Sixth Continent : Russia and making of Mikhail Gorbachev

by Mark Frankland

Pub. by Harper & Row Publishers, Inc. 10 East 53rd Street, New York - 10022.
1987, 292 pages Price \$ 22.95

The decade of the 80's may well be remembered in contemporary history as the decade of Mikhail Gorbachov. His surprise inclusion in the Politburo Eleven, in preference to a better established Romanov, in 1982, started his meteoric rise. In March 1985, the day after Chernenko's death, the Central Committee had no hesitation to elect, sponsored and vociferously commended by none other than Gromyko himself, Gorbachev as the General Secretary of the Party. Comparatively young energetic and positive about the imperatives for the party and the nation, he could look forward to long tenure at the helm of affairs. In mid 1989 Gorbachev was elected President by a 96% vote.

Since 1986, in the Russian polity and the world at large, Gorbachev ably supported by his wife, Raisa, has dominated the domestic and the international stage. His three-pronged thrust has been the cleaning up of the Party base, restructuring a bogged down economy through Perestroika and liberalised participation by the people in his Glasnost concept. In international affairs, his power politics has kept the leaders of the western democracies hardput to anticipate or forestall his diplomatic initiatives. "The U.S. is panicked at what the Soviets may say yes to" quotes The Times when the Soviet Foreign Minister brought a letter from Gorbachev, to the US President.

The Sixth Continent-Russia and the making of M Gorbachev, here, assumes special importance for the Russian reader. The author, Mark Frankland, a permanent Moscow correspondent of The Observer, masterfully leads us through the dark alleys, its shadows, ghosts and flashspots which would not otherwise be known. He, thus not only explains the emergence of the new hero-Gorbachev, an indisputed man of the moment, but also his perceptions and his modus operandi. The author writes from personal insight and responses to the undercurrents in Russia of the last two decades.

-- Maj Gen SK Talwar, (Retd)

The Sino-Soviet confrontation since Mao Zedong: Dispute, Detente or Conflict?

by Alfred D Low

Pub. by Social science Monographs, Boulder. Distributed by Columbia University Press, 562 West, 113th Street, New York, NY10025, 1987. Pages 322, Price \$ 40.00

This study is intended for students as there are few studies of a comprehensive character.

Under Gorbachev the Soviet Union is increasing its contacts with the

US and bent upon improving its relations with the Chinese People's Republic. For the present and foreseeable future China remains the weakest power between USSR, USA and CPR.

A genuine detente is not a likely prospect. According to the author ALFRED D LOW Soviet-American relations in the 1980s will be more tense than in 1970s. In conclusion there has been no serious talk about a Strategic shift to the East among Soviet leaders. Neither has the concept of weakening Europe for the sake of Asia prevailed in the US. The eventful year of 1989 has disproved many of the forecast made earlier in the 1980s. The Sino-Soviet rapprochement, the East-West detente ending the Cold war of the 1980s and finally, the resurgence of democratic movements in Eastern Europe have been a surprise to many.

-- Maj Gen BD Kale (Retd)

The People's Republic of China - Reflections on Chinese Political History since 1949

by Witold Rodzinski

Published by Collins, 8 Grafton Street London, W1 X 3 LA, (U.K.) 1988, Pages 304, Price \$ 17.50

The author is a former Polish diplomat. He did two political assignments in China and subsequently made a number of visits to that country. He now lectures in Chinese history at the University of Warsaw. He has written three books on China.

The Chinese Communist Party (CCP) with Marxism-Leninism as its sheet-anchor, has successfully led the country along a path of political consolidation, against the twin forces of imperialism and warlordism. This achievement was made possible by an old and splendid civilisation and the inherent strength of their peasantry.

While a fair amount of information about events in Communist China in the last four decades did filter through whispers, rumours, inspired leaks, diplomatic channels and the official media etc, there are some significant aspects that this book has put in print for the first time.

Witold Rodzinski, in his painstakingly researched and superbly analysed book offers an authentic storehouse of data on Chinese men and matters. It is an easily readable study and a contemporary political treatise on our most important Asian neighbour. If you have a propensity for statistics, this is the book for you.

-- Brig Rai Singh, MVC, VSM (Retd)

Embargo Disimplemented - South Africa's Military Industry

by Signe Landgren

Published by Oxford University Press, Oxford 01 x 2 GDP on behalf of SIPRI, 1989, Pages 276, Price \$ 30.00

This is a study of build up of South Africa's defence production since 1960 and its remarkable growth inspite of arms embargo since 1963 by the Security Council of the United Nations.

R&D and production are centralised under ARMSCOR, a fully owned Govt Company with direct links with the Defence Planning Committee. The company is exempt from provisions of the Company's Act; this maintains its confidentiality. It has grown from 2 units in World War II to 9. Its turnover was US \$ 1800 millions in 1981.

South Africa's strong economy based on its gold and diamonds and minerals, has a thriving steel and explosives industry which is a contributing factor. Of special interest are-

- (a) The production and offer for sale of G5 base-bleed howitzers and G6 self-propelled guns, 155 mm equivalent to our Bofors since 1982.
- (b) Production of aircraft and missiles, MIRAGE F-1 with French assistance.
- (c) CSIR, supported by Universities is the main Org for research - ARMSCOR spends 5-6% on R&D mainly for updating existing equipment. Each of ARMSCOR's subsidiary has its own R&D.

In 1982 ARMSCOR took part in an exhibition in Greece-DEFENDORY - 82, where it offered G5 Gun; Frequency Hopping Radiosets. In 1984 it took part in exhibition in Chile and contracted sales.

South Africa has huge resources of uranium and has set up a Uranium Enrichment Corporation.

The author is a Research Fellow of the Stockholm, based International Peace Research Institute. His earlier book on South Africa was titled, 'Southern Africa - The Escalation of A Conflict'.

-- Maj Gen Partap Narain (Retd)

Political thought in Modern India

by Thomas Panthan & Kenneth L Dentsch. (Ed.)

Pub. by Sage Publications, India Pvt. Ltd., M32, Greater Kailash, New Delhi - 48, 1986, Pages 363 Price Rs. 175/-

"Political Thought in Modern India" is a collection of twenty well written essays by eminent University Professors with distinctive achievements

in research and teaching of modern political thought. It is claimed that serious study of this subject has been hampered by the lack of any book offering consistent and high level analysis. Although, excellent books are available on particular thinkers or aspects, there are no books treating modern Indian political thought in its entirety. This lacuna, attributable to the single-authored nature of existing books, is sought to be remedied by this publication, a multi authored collection of essays which discuss the major Indian thinkers, Raja Ram Mohan Roy, Dayanand Saraswati, Bankim Chandra Chattopadhyay, Ranade, Phule, Tilak, Ambedkar, Tagore, Aurobindo, MN Roy, Jawaharlal Nehru and Gandhi. Hindu and Muslim traditions in Indian political thought, Hindu nationalism and the ideologies of community and Sarvodaya movements are discussed separately.

These well researched articles attempt to analyse the theories propounded by our thinkers against the socio-historical environment in which they evolved and to evaluate them against the socio-economic changes they were intended to bring about. In doing so, the authors have tried to provide a world-historical, and to an extent, a politico-economic perspective to their theories and to the ideologies of the important political movements in modern India.

There is a divergence of views in modern Indian political thought, one favouring adaption or adoption of western political traditions and other, the evolution of indigenous or alternative formulations. It has been suggested that both the actions have to merge in the formulation of an adequate political philosophy for modern India.

In its overall impact, this collection of interesting and well argued essays, constitutes a significant contribution to the study of modern Indian political thought.

-- Lt. Gen PE Menon PVSM (Retd)

India's Energy Scene: Options for The Future

by Col. R Rama Rao for Birla Economic Research Foundation

*Published by Radiant Publishers, E 155 Kalkaji, New Delhi - 110019, 1988,
Pages 140 Price not given.*

Power is the life line of industry and agriculture of a nation. India continues to be beset with chronic power shortages which is a serious drag on our developmental efforts. In the book 'India's Energy Scene' by Col Rama Rao, written under the aegis of Birla Economic Research Foundation, the author has catalogued the inventory of India's Power Resources. Power production through various routes have been analysed and projections made.

Nuclear and Renewal Energy Resources have been discussed. Energy conservation and R&D have been covered adequately. The book is laced up extensively with facts and figures in the form of tables. The figures may be taken as correct as the sources have been quoted. These may, however, be updated with the passage of time.

Col Rama Rao has recommended use of extensive thorium resources which India is endowed with. Nuclear power generation is capital intensive with long gestation period. Safety records of power plants have been far from satisfactory the world over. Nuclear plant technology in India is outdated. We are contemplating to import technology from the USSR who are themselves 'importing' it from West Germany. The latter have developed HTR 300 (high temperature reactors). The developed countries have since given up nuclear power projects. The hydrogen route may be the safe way out.

Research and Development have not been adequately covered in the book. Some serious efforts are, required in the research of 'Super-Conductors'. These are going to be the ultimate solution. It will reduce transmission on losses and costs considerably. Human Resources Development in the Power Sector has not been tackled in the book. The activities of Power Engineers Training Society could be high-lighted. Recently, Asian Energy Centre has been formed at New Delhi.

In sum, the book would make a useful reading to the energy engineers, industrialists and also the planners.

-- Lt. Col Lakshman Chand

Jane's Spaceflight Directory 1988-89

by Reginald Turnill (Ed.)

Published by Jane's Information Group. 163 Brighton Road, Covington, Surrey, CR 3 2NK, U.K. 1988, Pages 643, Price 80.00

This is the 4th Edition of Jane's spaceflight Directory and covers all aspects of space flights including review of progress during the year as Introduction to the Directory. It has brought out that Soviets have now confirmed their position as the leaders in space, but will the Soviets, likely to be ready a decade before the US to launch a manned mission to Mars - the space spectacular of 2001- or be prepared to wait for the nation that beat them to the Moon.

The Directory of 6,00,000 words contains National space and International Space Programmes which run to 1000 Programmes and 800

photographs. For those, who want to study space from Military point of view, a chapter on "Military Space" has been included. It deals with Military conflict in space and Monitoring space and provides information of 4 countries, i.e. Britain, France, USA and USSR on military programmes - communication, Early Warning, Navigation etc. US-SDI program is covered in detail.

To the technologist, a chapter as 'Notes' has been added in this year's edition and also in evolved Industry Section. There is tremendous pressure on space programmes for their ability to improve the standard of life for ordinary people on Earth by developing new products and technologies. In this chapter, crystal growth, space medicines, Electro-magnetic accelerators (not Religion) Holography etc. have been included.

The Directory also includes a chapter on Launchers (costs half of project's cost) and reflects on continuing delays that still beset Europe's Ariane project. It includes India's SLV-3, ASLV and PSLV projects. There are other sections giving information on spacemen, Launch Sites, Satellite Launcher - 1987, Space - log and Solar system.

It is extremely informative book and is recommended as Reference Book.

-- Maj Gen K B Narang (Retd)

Battle Fields of The Early 21st Century

by Maj Gen V K Madhok, AVSM, VSM

Published by M/s Sujay 12A/B Mathura Road, New Delhi - 1 1987, Pages 126, Price Rs. 120/-

Despite the steep three figure price tag, this book is worth buying by the serious minded man at arms. It is basically a compilation of articles earlier published in the Indian media by Gen Madhok, about technology as it would relate to future warfare. Most of the facts have possibly been gleaned from the plethora of written material available in the West; as is repeatedly brought out in the book that modern technology employed by advanced forces, would be out of reach for the Third World Countries for atleast a few decades; it should not be held against the author; because, the beauty of the book lies in the masterly ability of the General to relate it to our conditions in the 21st Century. The concepts suggested are original and thought provoking.

The book is immensely readable. The 'portrait' of a divisional commander, and the many future battlefield scenarios, with which this

exposition is laced, though appearing to come straight out of Asimar's sci-fi novels, create a scintillating and lucid television. The style is incomparable for holding attention.

'Battle Fields of the Early 21st Century' is an absolute must for all defence oriented libraries.

-- Lt. Col A K Sharma

The Killing ground : The British Army, the Western Front and the Emergence of modern Warfare 1900-1918

by Tim Traverse

*Pub. by Allen & Unwin, 40 Museum Street, London WC1A 1LU, U.K. 1987
Page 309 Price \$ 25.00*

The book deals with the role of the British Expeditionary Force (BEF) in the Great War of 1914-18, in Europe, the effect of the officer corps, specially the senior officers on modern war. The book mainly circles round Sir Douglas Haig, Field Marshal, who became the CinC of the BEF; his foibles and failures, due to pre-conceived ideas of the Napoleonic era, and his teachings at the Staff College. In brief it also deals with the emergence of the German War Machine. The author extensively uses unpublished diaries, letters, memoirs, cabinet and war office files, to explain why and how the British Army developed as it did.

On the personnel side, it studies the system of appointments, promotions and dismissals, the same way the aristocracy owned the Victorian Army. Failure of an attack with heavy casualties was acceptable, but refusal or suggestions were not. The Army Commanders attended the CinC's conference to listen and not to discuss the Plans or make any suggestions. Only the staff could change the CinC's mind.

This is an important new study of the British Army and the development of the German War Machine in the First World War and will be invaluable to all those interested in Military History and Strategy.

-- Brig Y P Dev (Retd)

India and Its Army

by Rajesh Kadian

Published by Vision Books Private Ltd. 36C Connaught Place,
New Delhi-110001 (INDIA) 1990. pages 180, Price Rs. 145.00

Rajesh Kadian's book on the Indian Army is an historical review of the Army, from its birth as a security force of the trading establishments

of British East India Company to the largest volunteer army in the world. For a civilian, who has not written previously on a military subject, Kadian's attempt on the ethos and traditions of the Indian army, its performance in wars and conflicts, in aid to civil authorities and as a catalyst in economic and technological progress is commendable.

The book covers the important milestones of the Army's history - The "mutiny" of 1857 and direct control of the government, the Presidency Armies and setting up of commands, regiments and operational formations of brigades and divisions. It describes in fair detail the Governor General's Council with Commander-in-chief and a Military Member, World War I, grouping regiment-wise according to caste and religion, setting up of a military college in India and training at Sandhurst, World War II, the partition of the Army at the time of Independence, the Conflicts of 1947-48, 1962, 1965 and 1971, involvement in Sri Lanka, the Punjab situation and the insurgencies in the North-East.

Kadian goes on to cover aspects of military posture in the future and possibility of the use of nuclear weapons, the Army's relationship with the government, civil bureaucracy and the media, arms production and procurement, joint operational command and the army's role in domestic and foreign policy matters.

The author has done extensive research but some of his statements tend to be rather radical. British officers were taught to integrate themselves with their men and did not use words like 'niggers' or 'slaves' to their soldiers. The Army had a small fraction of low-caste soldiers and the Mahar and Sikh Light Infantry Regiments were new raisings. The author's statement that there was a significant number of Chamar soldiers in the army is incorrect. Indiscipline and unsoldierly acts cannot be generalized and the few cases that occur have to be put down with a heavy hand. But to say that in Sri Lanka 'soldiers faced the problem of how to raise money for the cheap electronic goods and gold "....." is being unfair. Again to mention that the singular achievement of ITBP was to kill one of the two assassins of Mrs Gandhi is a misconceived idea on the role of this force.

All said and done, with the restrictions and security limitations imposed upon government and military officials (including those retired) in writing on military matters, Dr. Kadian has done an extremely good job in bringing out thought-provoking issues with an unbiased mind. It is a scholarly analysis based on deep research, on a subject having a wide canvas.

Col. V. KATJU

How to avoid, prepare for, and survive being taken Hostage; A Guide for Executives and Travellers

Published by DIANE, Defense Information Access Network, Indel Ave, Box 497, RANOCAS, NJ 08073, 1987 Pages 54, Price \$17.95

The book is a down to earth guide for executives and travellers. The 'pocket-slip' hand book is based on official, unclassified publications prepared by the Office of Security of the US Department of State which were made available to foreign posts of the State Department. The publisher believes that the measures outlined in this publication will minimise the potential for the reader to be taken hostage. The advice is sound, clear and detailed: it covers personal and family preparations, pattern of terrorist attack and precautions against Hostage taking. The adherence to these precautions may not completely protect you from terrorist violence, it reduces your vulnerability.

Surveillance of the various forms of the intended target and its detection increase your options if targeted. And should you become a victim, there is advice on survival, managing yourself, managing your time and managing your environment, and surviving interrogation, overcoming torture and pain. The book presents a great deal of crisp information and leaves one with the great assurance of avoiding being taken a Hostage despite the book's warning to the contrary. The book under review is one of outline on related subject of Terrorism, and worth its price.

- Col. Balwant Sandhu

The Strategic Air War Against Germany and Japan

by Haywood S. Hansell, Jr.

Published by Office of Air Force History, United States Air Force, Washington, D.C., 20402, 1986, Pages 300 Price not given.

The book is a personal memoir of Major General Haywood S. Hansell Jr. USAF (Retd), who was initially trained as a fighter pilot in 1928. During World War II he took part in strategic air operations in the European theater in 1942 and later in the Pacific conducted strategic air warfare against Japan in 1944-45. The book describes the origins of air power in the early years of this century, evolution of doctrines for its employment and its final test during air operations in World War II.

The author who was Commanding General, XXI Bomber Command describes the early teething troubles in air operations from the Pacific island bases and the evolving policies on strategic air offensive against Japan which was to destroy Japan's capability to support the war.

The author says that the doctrine of strategic air power was confirmed by the success of air assault on Japan. The defeat of that nation and its surrender were without invasion and with military forces still intact. Devastated by aerial bombing and its will broken, Japan could not wage war nor protect its people.

The book contains a large number of war pictures showing results of aerial bombing and useful maps and charts. The book is positively a valuable addition to the literature on strategic air operations in World War II. Whether these operations were 'decisive' in bringing about victory in Europe or in the Pacific is a point which would continue to be debated by soldiers and sailors.

-- NBS

SHREE DIGVIJAY CEMENT COMPANY LIMITED

"LOTUS BRAND"

For your requirements of quality O.P.C., Special Cement, Oil Well Cement, Sulphate Resistant Cement and Asbestos Fibre Roofing Sheets & Pipes/Asbestos Products

Telex : 31 61124 SDCC IN
Telephone : 3311771/3319526/3317551

G-18, Hans Bhawan
Bahadurshah Zafar Marg
New Delhi - 110 002

Addition to the USI Library for the Quarter Ending March 1990

I Biographies

- | | | |
|---------------------|---|------|
| 1. Ahluwalia, Sarab | Olive Green Cocktail : A Panorama of life in the Army. New Delhi, Mrs Raj Ahluwalia. | 1989 |
| 2. Khushwant Singh | Many Mood Many Faces. Delhi , Rupa & Co. | 1989 |
| 3. Sarkar, Bidyut | P.N. Haksar, Our Times and the Man, writings on the occasion of his 75th birthday. New Delhi, Allied Pub. (Pvt) Ltd., | 1989 |
| 4. Reddy, N Sanjiva | Without Fear or Favour: Reminiscences and Reflections of a President. New Delhi, Allied Pub (Pvt) Ltd. | 1989 |
| 5. Macksey, Kenneth | The Memoirs of Field Marshal Kesselring with a new Introduction. New Delhi, Lancer International. | 1988 |
| 6. Rolo, Charles J. | Wingate's Raiders: An Account of the Incredible Adventure that raised the Curtain on the Battle for Burma. (First Indian Paper back) Dehradun, Natraj Publishers, | 1974 |

II China

- | | | |
|------------------------------|---|------|
| 7. Salisbury,
Harrison E. | Tiananmen Diary : Thirteen days in June. London, Unwin Paper backs, | 1989 |
|------------------------------|---|------|

III Computer Programming

- | | | |
|---|--|------|
| 8. Kernigham, Brain W
&
Ritche, Dennis M. | The C Programming Language. 2nd ed. New Delhi, Prentice Hall of India. | 1989 |
|---|--|------|

9. Kernigham, Brain W
&
Pike, Rob. The Unix Programming Environment,
New Delhi, Prentice Hall of India 1984

IV India-Army

10. Farwell, Byron Armies of the Raj: From the Mutiny
to the Independence, 1858-1947.
London, Penguin Group 1989

V India - Defence

11. Subrahmanyam, K Perspective in Defence Planning,
New Delhi, Abhinav Publications. 1972

VI Indian History

12. - The New Cambridge History of India
(Series) New Delhi, Orient Longman, 1987

13. - A Comprehensive History of India
(Series), New Delhi, People's
Publishing House, 1987

14. Bhullar, Pritam The Sikh Mutiny
New Delhi, Siddharth Publications, 1987

15. Moon, Penderel The British Conquest and Dominion
of India, London, Duckworth, 1989

VII India - Politics

16. Kothari, Rajni Politics and the People:
In Search of a Human India, 2 Vols,
Delhi, Ajanta Publications. 1989

VIII International System

17. Geiger, Theodore The Future of the International
System: The United States and
the Political Economy, Boston,
Unwin Hyman, 1988

IX International Treaties

- | | | |
|---|---|------|
| 18. Grenville, JAS
&
Wasserstein,
Bernard. | The Major International Treaties
Since 1945 : A History and Guide
with Texts, London, Methuen &
Co. Ltd. | 1987 |
| X Terrorism | | |
| 19. Vas, EA. LT Gen | The Search for Security :
Controlling Conflict & Terrorism,
Dehradun, Natraj Publishers. | 1989 |
| 20. Alexander, Yonah
&
Sinai, Joshua | Terrorism : The PLO Connection,
New York, Crane Russak, | 1989 |

With Best Compliments From :

STEEL TUBES OF INDIA LIMITED

Steel Tube Road
Dewas - 455 001 (M.P.)

**LARGEST MANUFACTURERS OF
PRECISION STEEL TUBES**

*With best wishes
From*

**MODI ALKALIES AND
CHEMICALS LIMITED**

18 Community Centre
New Friends Colony,
New Delhi – 110 016

JOIN USI Correspondence Courses And Plan Your Career

Courses run by the USI

Courses	Dates		Fees *	
	Course commen- cement	Exa- mina- tion	All subjects (Rs.)	Each subject (Rs.)
1. DSSC Entrance Examination (Army)	Jul	Apr	500	100
2. DSSC Entrance Examination (Navy)	Jan	Jul		150
3. DSSC Entrance Examination (Air)	Jan	Jul	250	100
4. Technical Staff College Course (TSC) Entrance Examination (Combined examination for DSSC (Army) and TSC vide SAO/9/S/87 (Apr 90 onwards)	Jul	Apr	250	100
5. Promotion Examination Part D	Feb	Sep	350	80
6. Promotion Examination Part B	Jul	Feb	250	75
7. MSc Defence Studies (International Relations & National Security) Background materials for written examination.				100

*Life members are entitled to 10% concession on Tuition Fee. Membership of USI is compulsory for all courses.

Membership Fees

	Life (Rs.)	Ordinary (Rs.)
Entrance	50	50
Subscription	450	50 (annual)

*For further details write to the Chief Instructor,
UNITED SERVICE INSTITUTION OF INDIA
Kashmir House, Rajaji Marg, New Delhi - 110 011 (Tele 3015828)*

USI

(Estd. 1870)

OUR ACTIVITIES

Library Service

One of the oldest and finest military libraries in India, today it has over 50,000 books, and journals on its shelves, including books published in the 17th, 18th and 19th centuries, on an astonishing variety of subjects. While the principal emphasis is on strategy and defence, there are a large number of works on different facets of Indian life, as well as on other countries. It is a store house of rare books and manuscripts for scholars and research workers devoted to political and military study.

Correspondence Courses

The introduction of Correspondence Courses for promotion and Defence Service Staff College examinations some years ago found ready response and today the Institution has 1,500 members who participate in the Training Courses annually. Material is despatched to them regularly wherever they may be.

The students have undoubtedly profited by these courses, as evidenced by the success achieved by them in these Examinations. Popularity apart, the courses contribute substantially to the revenue of the USI.

USI Journal

Oldest Defence Journal in India, it contains proceedings of lectures and discussions, prize essays, original articles, book reviews, etc.

It is published quarterly in April, July, October and January each year (the first issue being Jan-Mar each year). The Journal is supplied free to members. It provides a forum for the most junior officer to express his opinions relating to his profession.

Gold Medal Essay Competitions

The gold medal essay competition is held every year. The subject for essay is announced during the month of March each year. On the occasion of the Centenary, an additional Gold Medal Essay Competition has been instituted for Junior Officers of not more than ten years' service.

Lectures and Discussions

A series of lectures by outstanding experts on service, international affairs and topics of general interest to the Services are organised for the benefit of Local Members in Delhi.

MacGregor Medal

This medal is awarded every year to officers for any valuable reconnaissance they may have undertaken.

Rules of Membership

1. All officers of the Defence Services and all Central Services Gazetted officers Class I (including Retired), Cadets from NDA, other Services' Academies and Midshipmen shall be entitled to become members on payment of the entrance fee and subscription.
2. Life Members of the Institution shall be admitted on payment of Rs. 500/- which sum includes entrance fee.
3. Ordinary Members of the Institution shall be admitted on payment of an entrance fee of Rs. 50/- on joining and an annual subscription of Rs. 50/- to be paid in advance.
4. The Ordinary Members who have paid subscription continuously for five years are eligible to convert their ordinary membership into Life Membership by paying Rs. 350/- only.
5. The period of subscription commences on 1 April each year and shall be operative till 31 March of the following year.

For further particulars, please write to Director, USI of India, Kashmir House, Rajaji Marg, New Delhi - 110011.

With best compliments from :

THE SARASWATI INDUSTRIAL SYNDICATE LIMITED

*(Prop. of : The Indian Sugar &
Gen. Engg. Corpn;
The Saraswati Sugar Mills, ISGEC
John Thompson,
Uttar Pradesh Steels).*

6, Community Centre, New Friends Colony,
Post Box No. 7007, New Delhi – 110 065.

Phone : 6830382

Gram : TALENTRUST

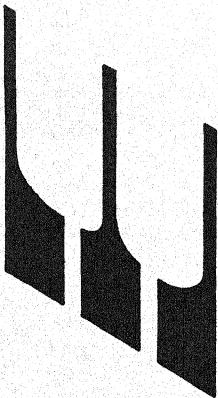
3rd Floor, Paras Cinema Building,
Nehru Place, New Delhi – 110 019 .

Phones : 6431320, 6431185

Gram : ISGECJAYATI

Quality. Technology. Innovation.

Bharat Electronics' new 3-pronged identity.



A company synonymous with the state-of-the-art in electronics, we are now poised for accelerated growth. Through a series of new initiatives.

Starting with our vibrant new symbol. Embodying our commitment to excellence on many fronts:

Quality in all our activities.

Technology of our products and production processes.

Innovation in our R & D, for greater self-reliance.

This is the thrust our new symbol represents. . ushering in an exciting future, taking off on our dynamic present.

Bharat Electronics Limited

(A Government of India Enterprise)
Registered Office : Trade Centre
116/2, Race Course Road
BANGALORE-560 001

R K SWAMY/BEL/3745